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ABSTRACT

This paper describes an approach for expanding assessment opportunities for students to demonstrate their understanding of content. The targeted population consisted of elementary and junior high school students in two schools in a growing middle-class community in north central Illinois. The elementary school enrolled 467 students and the junior high school had a population of 1,505 students. The problem of limited assessment opportunities was documented through data revealing parent and student opinions and attitudes toward tests, and observation checklists related to student performance. The analysis of the probable cause of limited assessment opportunities suggested lack of teacher training in assessment, the isolation of basic skills, a lack of performance tasks in the learning environment, and a strong emphasis on test scores. A review of solution strategies resulted in the selection of an intervention program that focused on an assessment approach combining traditional assessments and alternative assessments, including graphic organizers, rubrics, and checklists, to allow students to demonstrate their depth of understanding of the content. Post intervention data indicated an increase in opportunities to demonstrate knowledge and skills, higher order thinking skills, and a deeper understanding of content. Thirty appendixes contain sample assessments. (Contains 44 references.) (SLD)

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ED 435 660

EXPANDING STUDENT ASSESSMENT OPPORTUNITIES

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An Action Research Project Submitted to the Graduate Faculty of the School of Education in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Teaching and Leadership

Saint Xavier University & IRI/Skylight
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ABSTRACT

This research paper describes an approach for expanding assessment opportunities for students to further demonstrate their depth of understanding of the content. The targeted population consisted of elementary and middle school students in a growing, middle class community, located in north central Illinois. The problem of limited assessment opportunities was documented through data revealing parent and student opinions and attitudes towards tests, and observation checklists pertaining to student performance.

Analysis of probable cause research revealed that students' limited assessment opportunities is related to the lack of teacher training in assessment, isolation of basic skills, lack of performance tasks in the learning process, and the strong emphasis on test scores.

A review of solution strategies suggested by experts and other researchers, combined with an analysis of the problem setting, resulted in the selection of an intervention program which focused on an assessment approach combining traditional assessments (multiple choice tests, true-false tests, essay exams, etc.) and alternative assessments (graphic organizers, rubrics, checklists, etc.) to best allow students to demonstrate their depth of understanding of the content.

Post intervention data indicated an increase in opportunities to demonstrate knowledge and skills, higher order thinking skills, and a deeper understanding of content.

CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

The students of the targeted elementary and junior high classes are provided limited assessment opportunities in the classroom to demonstrate their depth of understanding. These limited assessment opportunities result in inadequate measures of student achievement. Evidence for the existence of the problem includes surveys, test scores, and teacher observations.

Immediate Problem Context

The School District is located in the far northwestern region of a mid-western state. It is adjacent to a large urban area (population 147,000) and approximately 90 miles northwest of a major metropolitan area. As determined by the state standards, the school district is considered to be a unit district with a large enrollment of over 1,799 students. A unit district is one that provides education for students in kindergarten through 12th grade and is under the direction of one superintendent and one school board. The targeted students are from two of the 12 schools within the unit district. School A and School B are approximately three and one half miles apart. The unit district serves students from three neighboring communities.

There are approximately 405 certified teaching staff in the school district. The racial/ethnic background of the staff is 99.5% White and 0.5% Asian/Pacific Islander. Male

teachers account for 26.2% of the teaching staff whereas 73.8% of the teachers are female. The average years of teaching experience among the teachers and administrators are 16.7 years. The number of teachers with a Bachelor's Degree is 46.9%, while 52.8% of the teachers have a Master's Degree or further education. The district average salary is $40,158. The average administrator salary is $68,991. Operating expenditure per pupil is $5,822.

The District's mission statement is to be a community of learners acquiring knowledge, skills, and attitudes necessary to enable students to reach their potential as contributing members of society.

School Site A

School A is an elementary school comprised of grades one through six. The recent addition of a kindergarten facility at another site houses all of the kindergarten students in the district. School A is one of eight elementary schools that will receive students from the kindergarten facility. The racial/ethnic background of students are 94.4% White, 2.1% Black, 2.8% Hispanic, and 0.6% Asian/Pacific Islander comprising a total enrollment of 467 students. There are 6.9% of the students reported as low-income. Low-income students are defined as those from families receiving public aid, living in institutions for neglected or delinquent children, being supported in foster homes with public funds, or eligible to receive free or reduced priced lunches. The percentage of Limited-English Proficient students eligible for bilingual education is 0.0%. School A has an attendance rate of 96.7%. Student mobility is 14.0%. Chronic truancy is 0.0%. The average class size is 24.5 students. The staff size of School A consists of 17 regular education classrooms and two self-contained special education classrooms. In addition to certified elementary teachers, School A employs one music teacher, one art teacher, one physical education teacher, one resource teacher, one speech pathologist, one

psychologist, one social worker, one nurse, one librarian, seven resource aides, two paraprofessionals, two secretaries, and two custodians.

School A, built in 1959, consists of 30 rooms, a well-equipped learning center, and one gymnasium. Each classroom has a minimum of six computers for student access. All students have one music class, one art class, and two physical education classes per week. On the days that students do not attend physical education classes, they participate in a 20-minute Physical Education Period (P.E.P) to enhance physical activity. Drug Abuse Resistance Education (D.A.R.E.) is included at all grade levels with an emphasis on sixth grade to educate students about the dangers of substance abuse. In addition to the regular school hours, students may stay after school and receive tutoring from senior citizen volunteers. Fifth and sixth grade students may also participate on the school basketball team or cheerleading squad.

School Site B

School Site B is a junior high school consisting of grades seven, eight, and nine. It is the only junior high in the district. The racial/ethnic background of students is 93.2% White, 2.1% Black, 3.3% Hispanic, 1.0% Asian/Pacific Islander, and 0.5% Native American comprising a total enrollment of 1,505 students. Sixteen and two-tenths percent of the students are reported as low income. The percentage of Limited-English Proficient students is 0.5%. School B has an attendance rate of 91.4%. Student mobility is 15.8%. Chronic truancy is 2.0% with 29 students classified as chronic truants (absent without valid cause for 10% or more of the last 180 school days). The staff of School B consists of 137 individuals. There is one principal, one associate principal, two assistant principals, one At-Risk Coordinator, one psychologist, one social worker, one At-Risk Case Worker, one speech pathologist, one nurse, one Crisis Intervention Specialist/Counselor, and two counselors. The certified teaching staff consists of four art

teachers, one business education teacher, one computer teacher, four foreign language arts teachers, two home economic teachers, 15 language arts teachers, nine math teachers, three music teachers, nine physical education teachers/health teachers, eleven science teachers, eight social studies teachers, 13 special education teachers, and three technical education teachers.

In addition to certified staff, School B employs eight paraprofessionals, five resource aides, one librarian, one library assistant, nine secretaries, nine office aides, one security guard, one in-school suspension supervisor, and six custodians.

School B, built in 1952, with an addition added in 1956, consists of 75 rooms, a well equipped learning center, two gymnasiums, a pool, four computer labs, and a large cafeteria. Many of the classrooms have been technology enhanced in part by the installation of computers and a Channel One Television System. The seventh grade students spend the entire day at School B, while many of the eighth grade students spend a portion of the day at a Technology Center. The ninth grade students are presently in a four by four block scheduling model. The ninth grade students are considered high school students even though they are housed at the junior high building.

School B implements a "family concept" as the education model at the seventh and eighth grade levels. Seventh and eighth grade students, who meet specific academic requirements, are candidates for the Academic Academy. Students with strengths and/or interests in the fine or performing arts can audition for entrance into the Fine Arts Academy. In addition to core academic classes, all seventh and eighth graders are enrolled in an exploratory sequence of classes, which are 35 days in length through a rotation of five courses. The school day consists of eight class periods, each 40 minutes in length.

TABLE 1.A RACIAL/ETHNIC COMPOSITION

	White	Black	Hispanic	Asian/ Pacific Islander	Native American	Total Enroll-ment
School A	94.4%	2.1%	2.8%	0.6%	0.0%	467
School B	93.2%	2.1%	3.3%	1.0%	0.5%	1,505
District	92.4%	2.4%	3.8%	1.2%	0.3%	6,730

TABLE 1.B LOW-INCOME AND LIMITED-ENGLISH PROFICIENT STUDENTS

	Low-Income	Limited-English Proficient
School A	6.9%	0.0%
School B	16.2%	0.5%

TABLE 1.C ATTENDANCE, MOBILITY, AND CHRONIC TRUANCY

	Attendance	Student Mobility	Chronic Truancy	Number of Chronic Truants
School A	96.7%	14.0%	0.0%	0
School B	91.4%	15.8%	2.0%	29

The Surrounding Community

The total student enrollment of the district is 6,730, with a total population of the district being 36,415. The population is divided in the following way: Whites 34, 851, Black 422, Hispanic 704, Asian/Pacific Islander 264, Other 174. The number of persons in the labor force totals 20,556, with a current unemployment rate of 4.18%. The number of households within the district are 13,477, of which 460 households are currently receiving public assistance. The median household income is $31,147 with the median home value being $54,696.

TABLE 1.D SURROUNDING COMMUNITY INFORMATION

Indicator	District
District Enrollment	6,730
District Population	36,415
White	34,851
Black	422
Hispanic	704
Asian/Pacific Islander	264
Other	174
Labor Force	20,556
Unemployment Rate	4,890
Households	13,477
With assistance	460
Without assistance	13,017
Median Household income	$31,147
Median Home Value	$54,696

The overall educational attainment for persons ages 20 and over are categorized as follows:

12th Grade or less/no diploma	5,859
High School Graduates	10,649
Some college/no Bachelor	7,087
Bachelor's degree or higher	2,168

The district enrollment has grown every year since the 1990-1991 school year. The most rapid growth has occurred in the elementary schools. Total student enrollment has grown from

5,794 in 1990-1991 to 6,730 in the 1996-1997 school year. Projections show total enrollment increasing by more than 300 students over the next five years. Enrollments should top 7,000 by the 2000-2001 school year.

Issues Facing the District

Due to a revision of the state tax cap laws, the 1998 district property tax rate was reduced from the rate of $5.50 per one hundred dollars of assessed value to $5.30 per one hundred dollars of assessed value. These tax revisions would have greatly reduced the amount of funds available, causing the district to place a referendum on the March 1998 ballot, asking voters to approve the return to the previous property tax of $5.50 per one hundred dollars of assessed value. The district organized a campaign that targeted businesses, families, school organizations, and the community to encourage support for the referendum. The campaign was very effective and the referendum passed with 63% approval. The funds generated will be directly used within the district to refurbish the junior high school and build an addition to the high school. By doing so, the ninth grade students currently housed at the junior high school will be relocated to the high school. The district is planning on these changes taking place in the 1999-2000 school year, but delays may prolong changes until the 2000-2001 school year.

In the fall of 1997, the district opened a new early education center which houses a preschool program for at risk children, as well as the kindergarten program for the entire district. The two major reasons for opening the center were:

1. To alleviate overcrowding within the other buildings due to increased enrollment. By doing so, space would be made available in other buildings.
2. To maintain a uniformed and consistent kindergarten program for all the students involved.

The school district in a prominent neighboring community is currently under mandate by the federal courts to offer a "choice" policy in their school assignments. Due to an ongoing desegregation lawsuit and the high cost of the court ordered remedies, property taxes within this neighboring district have continued to increase. This continual increase in the property taxes has caused many families in the affected district to move to the surrounding areas, thus increasing the current enrollment in our district.

The boundaries for the elementary schools in the district have recently been revised. Due to new home construction in the northeastern quadrant of the district, the student enrollment is rapidly increasing, causing overcrowded conditions in the neighborhood schools. School officials recently approved the redistricting of the boundaries for the two most northern elementary schools in the district, as one of these schools is at capacity while the other school is under capacity. Students currently enrolled in these schools may continue to attend the same school through sixth grade, whereas students entering these schools from the early education center or students new to the district will be assigned to the schools based on the boundary changes.

TABLE 1.E COMMUNITY HISTORY OF NEW CONSTRUCTION BY TYPE OF DWELLING

	Single Family	Multi-Family	Duplex	Total
1998	N/A	N/A	N/A	N/A
1997	235	204	8	497
1996	142	140	4	286
1995	188	35	38	261
1994	196	28	6	230
1993	191	36	18	245
1992	260	12	20	292
1991	248	67	32	347
Totals	1460	522	126	2158

National Context of the Problem

The limited assessment opportunities to demonstrate depth of student understanding in schools has recently been recognized as a significant problem associated with education. "Changes in beliefs about what students should learn and how they can best be taught are influencing the way many students are assessed" (Ryan and Miyasaka, 1995). There are several factors that contribute to the national problem of the lack of assessment opportunities in the classroom to sufficiently demonstrate student understanding. Some of these factors include limited teacher training in assessment, isolation of basic skills, lack of performance tasks, and the strong emphasis placed on test scores.

Hills (1991) blames the classroom assessment problem on the lack of training teachers receive. Only four of the 50 states require prospective teachers to take a course on evaluation. Most colleges of education offer courses in evaluation, but students are rarely required to take them. Hill also states that few students in the evaluation courses that he has taught, are able to construct test items that are clear, higher-level, and related to course outcomes. Stiggins (1985) goes on to say that if teachers receive little or no training in assessment and evaluation, they are not likely to receive this training in their professional teaching careers.

Teaching students isolated skills can also be a detriment to depth of understanding. Although some skills need to be taught in isolation, "... instruction which strongly emphasizes structured drill and practice on discrete, factual knowledge does students a major disservice" (NCREL, 1991a). Students need meaningful ways to organize the information and make it easy to remember (NCREL, 1991a). "Constructivists suggest that learning is not linear. It does not occur on a timeline of basic skills" (Burke, 1994). Burke (1994) further states, "In order for

meaningful learning to take place, people have to interpret information and relate it to their own prior knowledge." Students are given greater opportunities to demonstrate depth of understanding not through recall of basic facts, but through application of knowledge.

Lack of performance tasks in the learning process also inhibits depths of understanding. Performance is described as a knowledge in use (Jasmine, 1993b). Students need to not only know how to perform, but also when to perform and how to change the performance to fit new and different real-life situations (NCREL, 1991b). As a facilitator, the teacher's role is to provide ample opportunities for a student to experience and apply knowledge. Archbald and Newmann (1988) believe that it is important that classroom tasks have value outside of the classroom. Performance tasks, therefore, should prepare students for life, not just for tests.

"Tens of millions of students are tested and tested each year" (Ryan and Miyasaka, 1995). This demonstrates that there is a strong emphasis on test scores in America. "The most common purposes of state testing programs are accountability, instructional improvement, and program evaluation..." (Ryan and Miyasaka, 1995). Do multiple choice standardized tests really provide an accurate representation of what a student really knows?

These factors are some of the challenges that educators encounter across the nation. It is evident that teachers need to provide more assessment opportunities for students to demonstrate greater depth of understanding in the classroom.

CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

In order to document evidence of the limited assessment opportunities in the classroom, parent surveys and student surveys were distributed and analyzed within the first three weeks of the school year. Observation checklists of students' performance on assessments tasks were also maintained and documented by teachers.

The targeted groups involved included 31 students from School Site A and 80 students from School Site B, for a total of 111 students. Surveys were distributed to 132 students at School Site B, and analyzed, to provide a more realistic representation of the opinions of the students at the seventh grade level. However, the intervention will only be applied to 80 of the students at School Site B due to curriculum constraints.

Parent Surveys

The parents were asked to complete a survey pertaining to different testing choices that they were exposed to in school and their preferences. (Appendix A, 1 and 2). At Site A, 30 surveys were issued and 19 were returned. At Site B, 94 surveys were issued and 70 were returned.

The first questions on the parent survey pertained to one's feelings towards test. In response to Question One, "If your boss told you that tomorrow you had to take a test all day, what would your feelings be?" results included:

TABLE 2.A PARENT RESPONSE TO SURVEY QUESTION ONE

	Relieved: no work	Sick to your stomach	It doesn't matter, as long as I still get paid	Take a sick day
SITE A	7%	29%	64%	0%
SITE B	6%	22%	72%	0%

The results are consistent among the two sites. The majority of parents were not affected by the idea of taking the test, but rather the pay for the day. None of the parents indicated that they would take a sick day.

Question Two states, "Before taking a test, I am nervous." The results are as follows:

TABLE 2.B PARENT RESPONSE TO SURVEY QUESTION TWO

	Always	Usually	Sometimes	Never
SITE A	21%	29%	36%	14%
SITE B	10%	23%	60%	7%

It is evident that the majority of parents feel some sort of anxiety regarding tests. Less than 15% of the parents at each site stated that they did not have any test anxiety.

Questions Three and Four were in regards to how does the child prepare for a test and how does the parent assist in preparation. These questions were included in the survey for purposes

not directly related to the problem of limited assessment opportunities, thus data is not included.

The next relative question posed is Question Five, "What kind of test does your child take most often in school?"

TABLE 2.C PARENT RESPONSE TO SURVEY QUESTION FIVE

	Multiple Choice/true-false	Fill in the blank	Essay	I am not sure
SITE A	57%	36%	0%	7%
SITE B	59%	11%	0%	30%

It is evident that more than half of the parents at both sites felt that their children predominantly take Multiple choice/true-false tests.

Question Six on the parent survey given at Site B is in regards to the importance placed on tests in schools. Administrative concerns limited the use of this question at Site A, thus data could not be analyzed.

Question Seven (Question Six on the Site A survey) poses the question, "What are your test preferences?" A list of seven assessments then followed. Due to the nature of the ranking order, the outliers were analyzed. This includes the first, second, sixth, and seventh choices. The central rankings, third, fourth, and fifth choices, were not as diverse, and did not provide essential differences to allow comparisons in preferences.

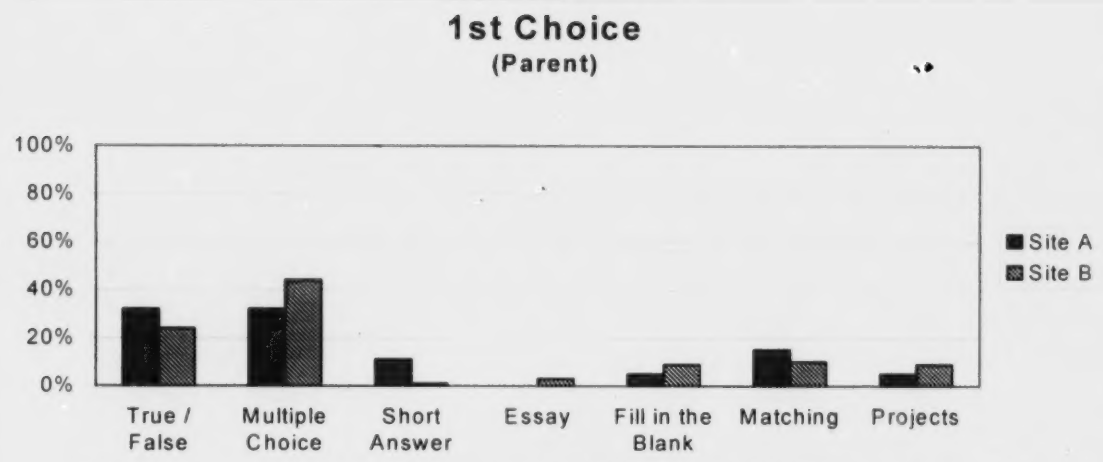


Figure 1. First choice of testing preferences of parents in a survey administered at Site A and Site B in September, 1998.

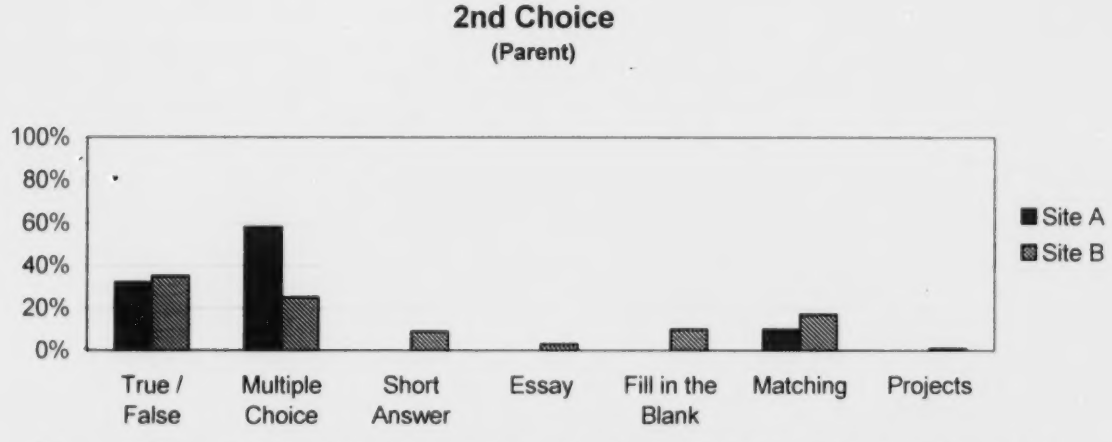


Figure 2. Second choice of testing preferences of parents in a survey administered at Site A and Site B in September, 1998.

There are several significant results within this data. Regarding the first preference among tests, the overwhelming majority of parents at Site A and Site B selected either True/false (32% and 24%, respectively) or Multiple Choice (32% and 44%, respectively). These two

categories constitute over 50 percent of the first choice responses. The second choice is clearly, again, True/false or Multiple Choice.

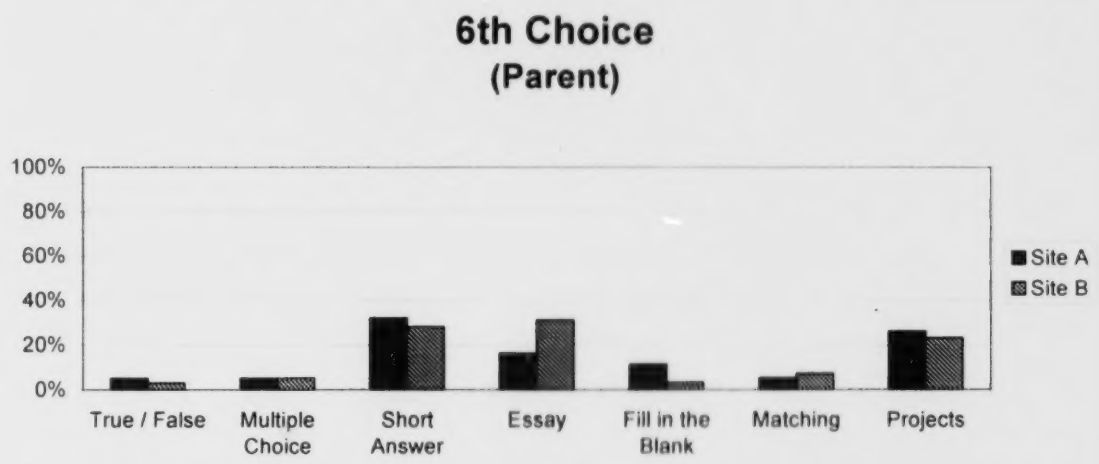


Figure 3. Sixth choice of test preferences of parents in a survey administered at Site A and Site B in Semptember, 1998

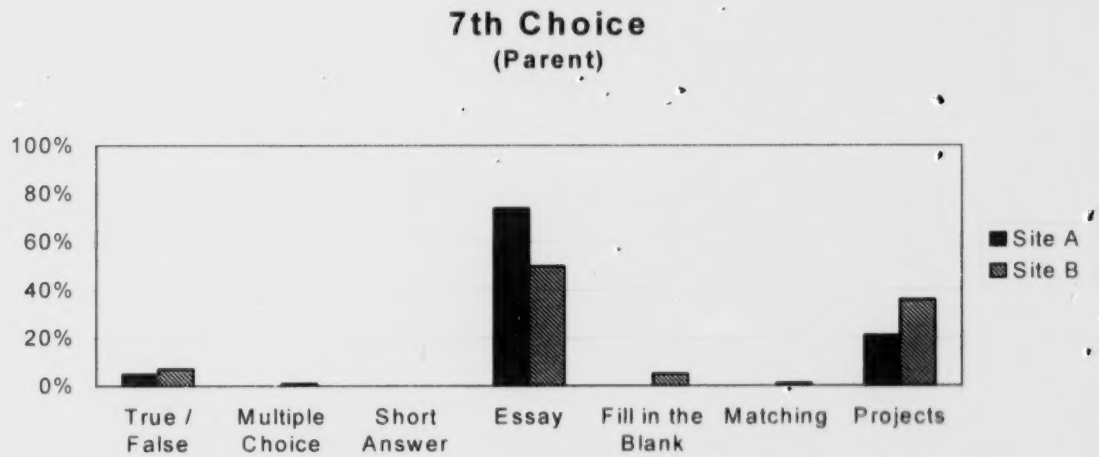


Figure 4. Seventh choice of test preferences of parents in a survey administered at Site A and Site B in Semptember, 1998

Among assessments that were least preferred, essay and short answer were cited. The second to last (sixth) preference was clearly short answer at Site A, while essay was cited at Site B. The least preferred (seventh) form of assessment was by far essay tests, with 74% at Site A and 50% at Site B.

Question Eight on the Site B survey addresses the parent's opinion regarding if their child would rather take a test or complete a project. This question was not used at Site A, due to administrative concerns. Thus data is not relevant.

The last question on each parent survey states, "I think tests are the best way to show what my child knows." At Site A, 57% of the parents agree with this statement, while 43% did not agree. At Site B, 43% of the parents agree with this statement, while 57% did not agree. The results were exact opposites among the two sites.

Overall, parents were very supportive in completing the surveys and returning them promptly. Several parents remarked that they were glad to provide feedback and were interested in the results of our research. It was expected that results would overall be similar, as Site A and Site B are within the same school district.

Student Surveys

Students were asked to complete a survey pertaining to their personal preferences on different assessments (see Appendix B). At Site A, 31 students were surveyed while in class. At Site B, 132 students were surveyed while in class.

Question One asks, "If your teacher told you that tomorrow you had to take a test all day, what would your feelings be?" students responded as follows:

TABLE 2.D STUDENT RESPONSE TO SURVEY QUESTION ONE

	Relieved; no work	Sick to your stomach	I don't care	Take a sick day
SITE A	10%	9%	19%	62%
SITE B	25%	31%	26%	18%

The results are not consistent among the two sites, possibly due to the age differences among the two locations. At School Site A, 62% of the students responded that they would like to take a sick day. At School Site B, the "sick to your stomach" response was most often cited, indicating that tests promote feelings of anxiety.

Question Two states, "Before taking a test, I am nervous." The results are as follows:

TABLE 2.E STUDENT RESPONSE TO SURVEY QUESTION TWO

	Always	Usually	Sometimes	Never
SITE A	5%	5%	43%	47%
SITE B	10%	15%	56%	19%

Students generally responded that they do sometimes get nervous, or never get nervous before taking a test. These results are slightly inconsistent with parent and student remarks in response to low test scores, as test anxiety is often the cause cited by researchers in below average test scores.

Questions Three and Four were in regards to how a student prepares for a test and how parents assist in test preparation. These questions were included for purposes not directly related to the problem of limited assessment opportunities, thus data is not included.

The next relative question posed is Question Five, "What kind of test do you take most often in school?"

TABLE 2.F STUDENT RESPONSE TO SURVEY QUESTION FIVE

	Multiple Choice/true-false	Fill in the blank	Essay	Matching
SITE A	14%	48%	38%	0%
SITE B	60%	33%	4%	3%

At Site A, most (48%) of the students felt that they predominantly take Fill in the blank tests, while at Site B most (60%) of the students felt that Multiple Choice/True-false tests were most common. Matching was cited least often at both schools.

Question Six on the student survey given at Site B is in regards to the importance placed on tests in school. Administrative concerns limited the use of this question at Site A, thus data could not be analyzed.

Question Seven (Question Six on the Site A survey) poses the question, "What are your test preferences?" A list of seven assessments then followed. Due to the nature of the ranking order, the outliers were analyzed. This includes the first, second, sixth, and seventh choices. The central rankings, third, fourth, and fifth choices, were not as diverse and did not provide essential differences to allow comparisons in preferences.

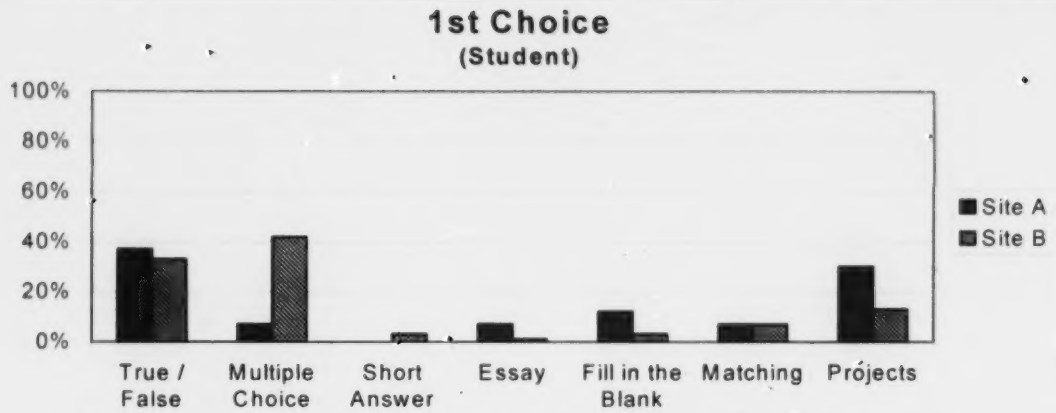


Figure 5. First choice of test preferences of students in a survey administered in class at Site A and Site B in September, 1998

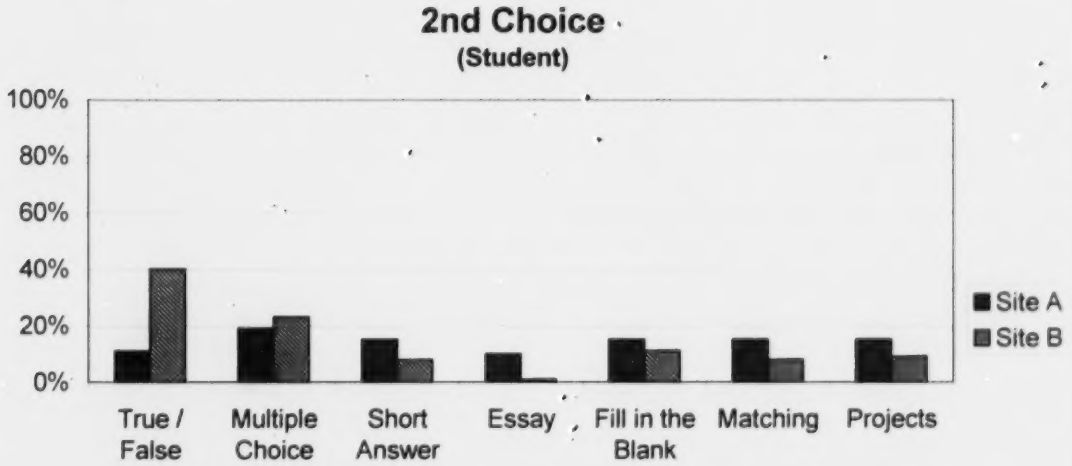


Figure 6. Second choice of test preferences of students in a survey administered in class at Site A and Site B in September, 1998.

There are several significant results within this data. Regarding the first and second preferences among tests, results were similar among the two sites. True/false was among the most popular assessments at both sites as the first choice (37% at Site A and 33% at Site B). At Site B,

Multiple choice did rank the highest at 42% for a first choice, while it was the most frequent response for a second choice at Site A (19%).

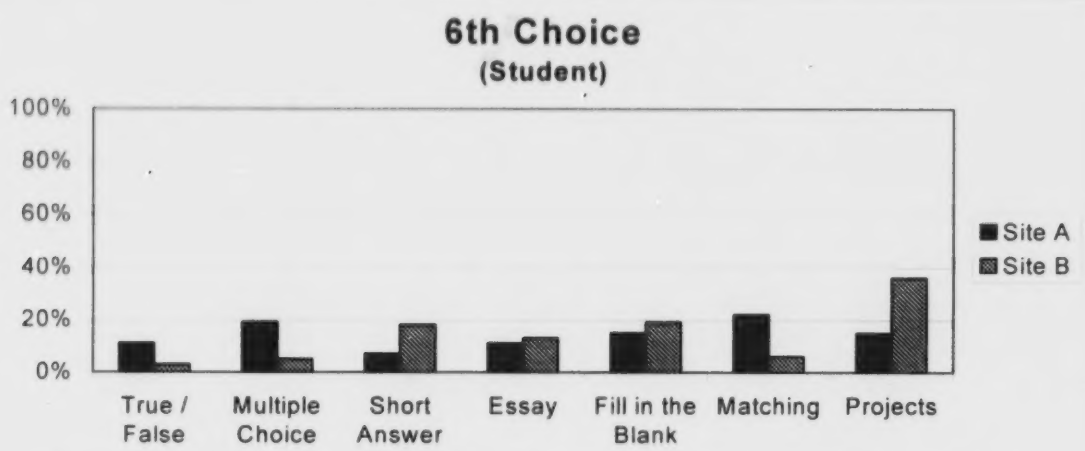


Figure 7. Sixth choice of test preferences in a survey administered in class at Site A and Site B in September, 1998

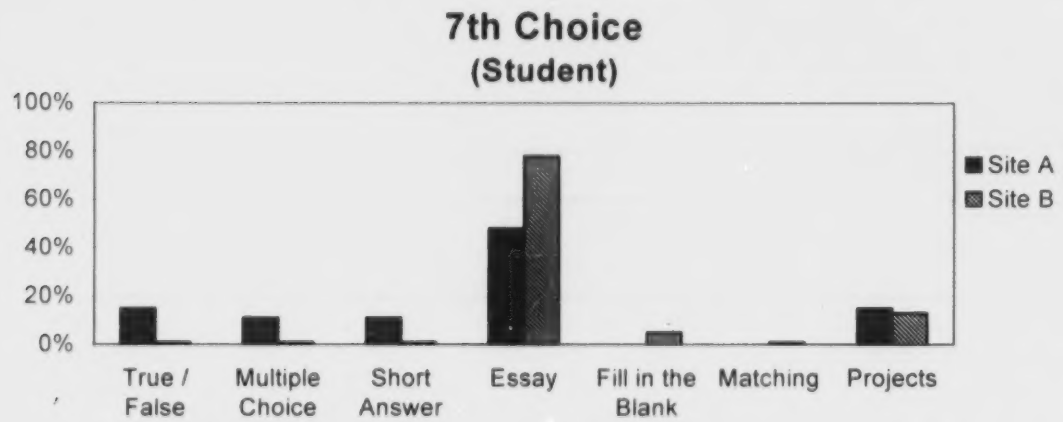


Figure 8. Seventh choice of test preferences in a survey administered in class at Site A and Site B in September, 1998

Among assessments least preferred, the sixth choice was highest for Matching at Site A, with 22% and Projects at Site B, with 36%. It is difficult to interpret what a student assumed projects to mean. The least preferred assessment (seventh choice) was overwhelmingly essay at both sites, with 48% and 78%, respectively.

Question Eight on the Site B survey addresses the students' opinion regarding if tests are the best way to show their knowledge. This question was not used at Site A, due to administrative concerns. Thus data is not relevant.

Observation Checklists

Teachers at both sites A and B completed observation checklists pertaining to student performance on assessment tasks. An observation checklist was developed by the researchers to aid in the recording of the students' focus on areas of commitment to task, attention, and ability to complete the activity (see Appendix C). The researchers observed the targeted students during instruction time over the course of the first semester of the 1998 - 1999 school year. After using the observation checklists for several activities at both sites, it became apparent that the observation checklists were merely documenting student behaviors, as opposed to performance tasks. This data did not align with the intentions of the checklists, as researchers discovered that the students with chronic behavior problems continued to show inattention to the task regardless of what it was. Students that have a positive approach to learning continued to demonstrate proper attention to the task observed.

Summary of Evidence of the Problem

Overall, evidence of the problem indicates that the students are least comfortable performing on assessments that require the demonstration of in-depth knowledge. This includes essays, projects, and short-answer tests. Ironically, these forms of assessments are the ones that

require the most teacher preparation in the development of the assessment and grading of it appropriately. Perhaps students do not have enough exposure to these forms of assessment, thus creating more discomfort when they do have to perform on such assessments. Students overwhelmingly prefer true-false and multiple-choice tests. These forms of assessment offer little in the analysis of higher order thinking skills. The evidence of the problem suggests that assessments should be varied throughout schooling to foster comfort and adeptness at numerous levels.

Probable Causes

The literature suggests several underlying causes for the limited assessment opportunities for students in the classroom to demonstrate depth of understanding. The causes identified can be grouped into the following categories: lack of teacher training, isolation of basic skills, lack of performance tasks in the learning process, and the strong emphasis on test scores.

The first probable cause, limited teacher training in assessment, is a significant factor in the assessment opportunities available in the classroom. In the majority of classrooms, it is the teacher's decision as to which method of assessment to use. Most teachers use the forms of assessment that they are most comfortable with, which is often how they were assessed as students. This is due to the fact that most teachers are not required to take courses in alternative forms of assessment (Hills, 1991). Schurr (1998) states, "Teachers have often relied on materials and methods for both learning and assessment that distort some of the real purposes of education." Many teachers use textbook author generated assessments that were created by someone who is not the teacher in the classroom and who is not aware of various needs and learning styles of the students in that classroom. These assessments focus only on the content covered in the textbook, without regards to what may have really been happening in the

classroom during discussions, observations, or extension activities. The textbook author generated assessment may not fully demonstrate the depth of the students understanding.

Across the nation, there are school districts that are concerned with the limited teacher training in assessment. "In order to change the current habits, structures, and policies educators must be prepared to confront many challenges" according to Zessoules and Gardner (1991). To promote teacher training in assessment, there are several obstacles at the district, administrative, and teaching levels in the education process that need to be combated. The first, and most difficult challenge, is convincing teachers the need for diversity in assessment and encouraging them to participate in the changes in assessment (Clark and Clark, 1998). The other major obstacles, according to Zessoules and Gardner (1991) include:

1. Teachers must be allowed to incorporate the practices of authentic assessment in their classroom.
2. School administrators must find ways to support teachers as reflective professionals working together to confront the issues at the heart of authentic assessment.
3. Educators must elicit support from the widest possible audience for assessment.
4. Educators must confront pressures for accountability.

It is evident that to effectively change current practices in assessment, the teachers, administrators, and school district must be actively involved in the process.

Effective teacher training in assessment would promote more classroom opportunities for the students to demonstrate their depth of understanding. Cizek (1995) emphasizes that the teacher has several roles in assessment for it to be the most effective:

> For one, it is clear that teachers need to understand the role and importance of assessment in their classrooms. They also need the skills to create classroom assessments, to evaluate assessment information, and to interpret the results of assessments to students, parents, and professional colleagues.

Schurr (1998) further stresses, "It is important for teachers to perfect their skills in test design to make them more accurate and reflective of what the students know and can do." In order to make these goals of effective teacher training in assessment more comprehensive, the National Council on Measurement in Education has joined the American Federation of Teachers and the National Education Association to identify and endorse a complete set of classroom assessment competencies for teachers (Cizek, 1995). Teachers that meet or exceed these competencies will in turn be giving students in their classrooms more opportunities to demonstrate the depth of their knowledge.

The second probable cause for limited assessment opportunities is due to the strong emphasis placed on the teaching of basic skills. Students need to master basic skills, but it seems that the more we focus on the basics, the less our children actually learn (Combs, 1997). The reason this occurs is because students are taught the skills in isolation, without being given a chance to relate the skills to what they already know. Students are given few, if any, opportunities to apply newly acquired skills to other areas of learning. Howard (1994) states, "Learning is easier when experiences are interconnected rather than isolated or compartmentalized in subject areas."

While it is important for students to be given opportunities to relate new information to what they already know, it is not always possible for children to do so because of their age and experiences. Due to the various backgrounds and experiences of children in schools, our focus as

educators should be on making the curriculum content meaningful to students. This can be done through classroom discussions and extension activities in addition to the traditional methods of memorization and repetitive drills. Focusing only on factual information and basic skills may not be relevant to a child's intellectual growth (Gilman, Andrew, and Rafferty, 1995). As Helm, Beneke, and Steinheimer (1998) state, "Children, especially in the early years of schooling, learn from hands-on, thought provoking experiences because these experiences challenge children to think."

In addition to teaching basic skills, we must also teach students how to think and problem solve. In solving a problem, it is important to find the correct answer, but by focusing only on the solution, we may be overlooking alternative ways of arriving at solutions (Steele & Arth, 1998). There are situations when there can be more than one way to find the answer. The approach used to solve a problem may vary greatly depending upon the strengths and weaknesses of the individual solving the problem. It is imperative that teachers value the student's method of thinking and respect the student's personal frame of reference (Steele & Arth, 1998). Equally important to accepting each individual's strengths and weaknesses is teaching the student problem solving processes and giving the student opportunities to employ those processes (Steele & Arth, 1998). These opportunities will provide students with further chances to demonstrate their depth of understanding of content.

The third probable cause related to the limited assessment opportunities a student has in the classroom is the lack of performance tasks that a student is engaged in. Performance tasks, or assessments, are different from that of textbook author generated tests. Textbook author generated tests, which are often objective tests, are certainly efficient both to administer and score, have long been felt to yield reliable and valid data that can be valuable to educators

(Jasmine, 1993a). Jasmine (1993a) further states, in regards to objective tests, "they simply do not support current instructional practices in the same way performance-based assessments do." Performance based assessments evaluate what students can do by examining them in the process of demonstrating a skill by performing a specified task.

Still, many educators do not incorporate performance tasks in the assessment process. Clark and Clark (1998) believe teachers rely on objective tests because it is much easier to develop skill or content based assessments rather than design a performance task that measures the mastery of the given skill or content. Performance tasks are often evaluated using a teacher created rubric, which establishes criteria and performance levels that are represented by student achievement or exhibitions (Clark & Clark, 1998). The development of this rubric often takes time, as it requires the teacher to create a scoring guide that clearly states all of the elements that will be evaluated in the performance task. The development of the rubric and creation of the performance task is often avoided, as many teachers, due to time and effort involved, continue to use objective assessments.

Performance based assessments are valuable to all teachers because this type of testing supports the actual work in the classroom and enhances teacher and student involvement in the evaluation process (Higgins and Heglie-King, 1997). The value of performance based assessments is that the student can further demonstrate what they know in an active process. Teachers and students are more likely to remember a learning experience that involves a project, play, research paper, or field trip in which they become immersed in a topic or issue (Combs, 1997).

According to Jasmine (1993b), performance assessments should have certain essential characteristics. The first characteristic is the incorporation of a variety of learning behaviors,

such as attentiveness and commitment to the task in which the students are actively engaged. The second characteristic is that the performance assessment should be designed to allow for more than one solution. The students then must justify how they arrived at their final solution. The third characteristic is that the performance task will result in a single product, such as a dramatization, project, or presentation. These characteristics help to ensure that students are displaying their knowledge in a complex, open-ended, and coherent manner (Jasmine, 1993b).

Many teachers who use performance-based assessments confirm that such assessments provide information critical to responsive teaching: information about how students think, what they understand, and the strategies they use in learning (Darling-Hammond & Falk, 1997). Incorporation of performance based assessments in the classroom provides greater opportunities for students to demonstrate the depth of their knowledge in an active learning process.

The final cause related to the limited assessment opportunities for students in the classroom is the strong emphasis on test scores. For many years the major part of assessment in many school districts has been consumed by testing. "... testing is recognized widely as the instrument used for measuring student learning across the country" (Zessoules & Gardner, 1991). In addition to teacher created and textbook author generated tests, the National Center for Fair and Open Testing estimates that each American child takes as many as three standardized tests every school year (Neill & Medina, 1989). Although testing of all types is still helpful, standardized tests are often not used properly. Tests that rely on multiple choice or short answers do not adequately reflect students' performance or their abilities to solve problems in real world situations, nor do they tap the variety of ways in which individuals think, learn, and demonstrate their knowledge they know (Darling-Hammond & Falk, 1997). Norm-referenced and

criterion-referenced types of tests that show student achievement are still the most common forms of assessments used throughout the country.

Problems associated with traditional tests are derived from the misuse or abuse of test scores by parents, teachers, other educators, and policymakers. The most common purposes of state testing programs are accountability, instructional improvement, and program evaluation. Less common purposes are student diagnosis, placement, and high school graduation (Ryan & Miyasaka, 1995). Pressures for accountability, student sorting, and progress reports have placed a demand for students to be evaluated in a timely manner. There is a need for providing a "score" that will satisfy the needs of parents and politicians who are looking for criteria for making comparisons and judgements regarding student achievement (Clark & Clark, 1998). A grading policy that provides non-threatening feedback can help students concentrate on learning. Most public schools today use numerical and/or letter grades to show student performance as opposed to anecdotal records to indicate achievement and progress made by individuals. Jordan (1996) indicates that the emphasis should be on growth, not simply the acquisition of specific knowledge, which is indicated by numerical grades. An apparent disadvantage of grading is the emphasis placed on the scoring, not the learning. Testing produces grades, which in turn produces stress and anxiety among many students. Although grades have significant purposes that should not be overlooked, some are counterproductive to student development and student learning (Reedy, 1995). One criticism of traditional approaches to assessment is that they require students to respond to questions or tasks that have no worth while, real-life, or authentic counterpart (Ryan & Miyasaka, 1995). What is done in the classroom from day to day can be drastically different from what is being tested.

This research questions the traditional practices of assessing student achievement. In order to change the current practices in assessment, teachers, administrators, and policy makers need to combine efforts to provide students with ample assessment opportunities. It is evident through the literature and site based research that the lack of teacher training, isolation of basic skills, lack of performance tasks, and the strong emphasis on test scores all result in limited opportunities for students to demonstrate the depth of their knowledge.

CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

A review of the literature revealed many findings, which contribute to inadequate assessment opportunities in the classroom. Several methods should be considered when constructing an intervention to promote positive educational experiences in an attempt to increase academic achievement. The professional literature suggests a number of solutions that address greater opportunities for students to demonstrate understanding in the classroom. The three solutions discussed in the following portion of chapter three include cooperative learning, multiple intelligences, and alternative assessments.

The first proposed solution to increase assessment opportunities in the classroom is through the use of cooperative learning. According to Bellanca and Fogarty (1991), "Cooperative learning encourages internal motivation, which invites students and teachers to learn how to inquire together." In a cooperative learning classroom, the teacher uses a variety of structures and strategies to build on task attention, trust, and shared success. One component of cooperative learning is the use of cooperative groups to enhance skills in all areas. A cooperative group generally consists of two to five students of different abilities, skills, motivation, sex, or racial origin who work together to achieve a single learning goal (Bellanca & Fogarty, 1991).

Teachers use cooperative learning groups to focus not only on content, but also on social and academic skills. Bellanca and Fogarty (1991) state, "...the cooperative learning approach provides the means for establishing positive collaborative relationships among students and teachers."

Cooperative learning groups within the classroom provide the teacher with the opportunity to shift roles. A teacher's role is quite different during cooperative lessons from that during a teacher directed lesson. Instead of lecturing, grading workbooks, and giving tests for student recall, the teacher will now be promoting active learning through the use of group skills and motivating higher level thinking. The teacher is now a facilitator, as opposed to a trainer, and will give immediate feedback to the groups as they progress through the given activity or task. Students will be required to use creative thinking to solve, analyze, evaluate, and synthesize the given problem (Combs, 1997).

Bellanca and Fogarty (1991) have highlighted how cooperative groups differ from that of traditional learning groups:

TRADITIONAL LEARNING GROUPS	COOPERATIVE LEARNING GROUPS
One goal/task learned at a time	Higher-order thinking is woven into every lesson
Groups are done when product/task is done	Social skill are explicitly taught
Social skills are taken as a given	Teacher focuses on group interaction
One leader gets main role	Roles are shared and mixed

Evaluate group without looking at individual efforts	Individual contribution to group goal is evaluated
Teacher grades product	Group looks back and processes its interactions and group work
Homogenous groups created	Students with different characteristics are mixed/matched
Students only responsible for themselves	Members share responsibility for group
Each student relies on him/herself	Students rely on each other

Marcus and McDonald's (1990) acronym BUILD highlights the variables that produce the power in cooperative groups. The acronym BUILD stands for:

B = build in higher-order thinking

U = unite

I = individual learning

L = look back and debrief

D = develop social skills

By using the components of the BUILD lesson plan, students will increase their abilities to reason, solve problems and make decisions while utilizing important curricular content. Not only will this help students to find the answers, but it will also help them to find out how the answers were derived.

Research has shown cooperative learning and cooperative groups increase mastery of basic skills. It does this by providing a greater opportunity to challenge students to think more

skillfully, solve problems, and generate new concepts. Cooperative learning is one instructional strategy, which provides an opportunity for students to demonstrate their depth of understanding.

Bellanca and Fogarty (1991) strongly support the use of cooperative learning in the assessment process. However, it is important to note that it is a learning tool, rather than a true assessment tool. Cooperative learning focuses on the process a student undergoes in the development of understanding. It can not be accurately used to measure understanding though, as it involves the efforts of a group of students working together towards a common goal. The risk of cooperative learning is the possibility that not every student is equally engaged in the learning process. True assessment of understanding can be inaccurate as the individuals understanding may be distorted by the group's accomplishments.

Another proposed solution for expanding assessment opportunities is the incorporation of activities that relate to the Multiple Intelligences. According to Chapman (1993), "Every child can learn. It is our responsibility as educators to find each student's particular way of learning". Every child learns and processes information differently. Using Multiple Intelligences in the classroom is one strategy that facilitates student learning.

The theory of Multiple Intelligences was developed by Howard Gardner in his book entitled Frames of Mind, published in 1983. Gardner named seven intelligences that met his established set of criteria. The intelligences include verbal/linguistic, logical/mathematical, visual/spatial, musical/rhythmic, bodily/kinesthetic, interpersonal, and intrapersonal. Recently, Gardner added an eighth intelligence, the naturalist, which met all of the established criteria. Unlike an IQ test, which yields a numerical score, the Multiple Intelligences cannot be measured in numerical terms; rather it identifies a person's strengths and preferences in processing information. Strengths can be in one, several, or many areas depending on the individual.

One reason this theory has gained popularity in schools is because it allows educators to incorporate activities that address a variety of learning styles. When students can work from their strengths, they have more confidence in their abilities, which in turn improves their self-esteem and motivation. The theory of Multiple Intelligences also allows teachers to see students succeed in areas that may have previously been underdeveloped. Hoerr (1996) states that Multiple Intelligences is a theory that "changes the way we look at students and their potentials."

Researchers state that another reason that Multiple Intelligences has gained popularity is because many educators have realized the limits of standardized testing as a tool to demonstrate student learning. Standardized tests are predominantly composed of questions that would be classified as logical/mathematical or verbal/linguistic. Students who are strong in these areas generally perform well and score in the upper quartile. On the contrary, students who are not strong in these particular areas tend to score low, which gives the false impression that they are not learning. However, many of these students have strengths, which are equally important, that cannot be measured on a standardized test, but can be demonstrated successfully in the classroom. Sternberg (1996) states, "Conventional academic intelligence tests account for less than ten percent of the individual variation differences in actual performance." This emphasizes that what a student demonstrates in the classroom is far more significant than the results of a conventional test.

"Recognizing that students learn differently and develop at varying rates makes educational change imperative" emphasizes Jordan (1996). The incorporation of Multiple Intelligence activities enables students to better demonstrate understanding, but this requires changes in the educational process. The first, and sometimes most difficult challenge, is to convince educators and administrators of the value of Multiple Intelligences. Smagorinsky (1996) states, "With

historical values institutionalized in standardized assessment practices, it's hard to persuade educators and their constituencies that alternative ways of learning are equally valuable." Using Multiple Intelligences does not require revamping the curriculum. It does not change what skill and content are taught, but rather how they are taught. Multiple Intelligence activities can be incorporated in schools throughout the nation, regardless of socioeconomic status, regional location, and grade level. According to Hoerr (1996), "... each school's implementation of Multiple Intelligences will be culture-specific, context-specific, and school-specific."

In order for Multiple Intelligences to be successful, teachers and administrators need to be skilled in how to implement instructional strategies that reach a variety of learners. By alternating methods of instruction, teachers are more likely to meet the differing needs of individual students, thus encouraging active involvement in the learning process. In summary, Teele (1996) states, "The theory of Multiple Intelligences becomes the vehicle for all students to achieve and is the key to providing quality instruction."

Howard Gardner (1995) emphasizes that although the theory of Multiple Intelligences has numerous appropriate applications in the classroom, it is not the "end all, be all" solution. The incorporation of Multiple Intelligences does provide greater opportunities for students to demonstrate understanding through areas of strength. However, teachers must take great cautions to not assess students on how "linguistic" they are, or how "bodily-kinesthetic" they are (Gardner, 1995). Gardner (1995) further states, "Intelligences ought to be seen at work when individuals are carrying out productive activities that are valued in a culture." The role then, of Multiple Intelligences in the classroom is to provide alternate approaches to a concept or subject matter for a greater opportunity of student mastery. The Intelligences should not be used as an assessment tool, but rather a learning tool.

The third proposed solution for expanding assessment opportunities in the classroom is the use of alternative assessments. "Assessment refers to the process of gathering and organizing information or data in ways that make it possible for people- teachers, parents, students, to judge or evaluate" (Chittenden, 1989). Tests, which differ in variety from teacher created to standardized forms, are designed to judge, check, and evaluate a student's learning. Although tests are the most commonly used method in education to judge and evaluate a student's performance, an assessment program should not be limited to such assessments. In addition to tests, a school district should include other types of evaluative tools such as observations and performance samples. Observations refer to the information and ideas that teachers and students record. Performance samples are documents or artifacts that demonstrate student accomplishments. The purpose of an assessment program is to give an opportunity for all persons involved a systematic and purposeful use of various methods of looking at where you are and where you are going (Jasmine,1993b). Alternative assessment techniques and strategies such as portfolios, interviews, questionnaires, reflections, and exhibitions, help to promote more in depth instruction. "Assessment, as opposed to simple one-dimensional measurement, is frequently described as a multitrait-multimethod; that is, it focuses upon a number of variables judged to be important and utilizes a number of techniques to assay them...its techniques may also be multisource...and/or multijudged" (Anderson, Ball, Murphy, and associates 1975).

Observations can provide great insight into a student's academic performance in the classroom. Teachers can use observation checklists as one method of recording events as they occur in the classroom. Areas of focus on the checklist may include if the student stayed on task, listened to and followed directions, and demonstrated knowledge of subject matter. Much of these observations can be made during cooperative learning activities or individual work.

Informal and formal observations can be documented to demonstrate growth in academic and social areas as the school year progresses.

Since the 1980's, it's suggested that performance samples of students' work can be used to enhance instruction and provide information useful for the purposes of evaluation (Reckase,1995). One type of a performance sample is the portfolio. "A portfolio is a systematic, purposeful and meaningful collection of a student's work in one or more subject area" (Reckase, 1995). The two major characteristics of a portfolio, according to Reckase (1995) are:

1. The materials contained within the portfolio demonstrate the student's knowledge in a particular content area and the student's ability to incorporate that material with other knowledge.
2. The portfolio charts student's growth and indicates the student's value in their work and accomplishments.

Another type of performance sample is a graphic organizer. A graphic organizer is a tool that is used to help students organize information in a way that promotes higher level thinking. Examples of a graphic organizers are the Venn Diagram, KWL, Ranking Ladder, PMI, and T-Chart. Through the use of graphic organizers, students are given many opportunities to organize their knowledge and skills which makes it possible for higher order thinking to take place.

The use of alternative assessment involves professionals in education at virtually every stage to ensure students' academic success. In order for school districts, administrators, and teachers to have an active role in the assessment process, the district must devise a plan for offering the professional development needed for each party to meet their assessment

responsibilities (Stiggins, 1995). When using alternative assessments, Cizek (1995) states that there are four required characteristics that school district administrators must possess:

1. Intimate knowledge of what occurs in classrooms
2. A clear focus on the desired educational outcomes targeted by the curriculum programs currently in place
3. Familiarity with purposes of a given assessment and the audience to which results are reported
4. Understanding of fundamental assessment concepts

School districts will often form committees of individuals, involved in various stages of the education process, to become leaders in the assessment process as it evolves. One goal of this committee is to relay information to others as it becomes available on alternative assessments. Another significant goal for this committee is to ensure that information yielded by any assessment is actually used to further the mission of the school (Cizek, 1995), and not used merely to incorporate a new tool in the educational process.

School administrators and teachers are continually looking for ways to successfully assess students in which the depth and quality of their knowledge can be evaluated and supported in regards to the academic standards and objectives. "A school culture concerned about the quality of its assessments establishes performance expectations that reflect standards of quality and provides support systems for teachers and administrators who aspire to satisfy these standards" states Stiggins (1995). Some of these support systems include classroom assessment resource centers, technology support in collecting, storing, and retrieving information on student achievement, and ongoing technical assistance in assessment challenges. Professional development opportunities in assessment should also be provided. Support systems also include

other faculty, which make the communication between administrators and teachers more effective. During the course of the school day, teachers and building administrators usually do not have opportunities to discuss the daily occurrences in the classroom. Through the help of support personnel, administrators will be able to acquire and maintain a current understanding of what knowledge, skills, attitudes, and proficiencies will be assessed by the classroom teacher (Cizek, 1995).

Stiggins (1994) published a teacher's handbook, Student-Centered Classroom Assessment, which was distributed by the Assessment Training Institute detailing the assessment component in the educational process. Typically, administrators and teachers are the primary people involved in the assessment process. However, depending on the culture of the school, many other important people will play a significant role in the students' academic success. Stiggins (1994) included in the handbook a list of the people that affect the quality of the assessment process:

USERS	**KEY QUESTION(S) TO BE ANSWERED**
classroom level	
Student	Am I meeting the teacher's standards?
	What help do I need to succeed?
	Are the results worth my investment of energy?
Teacher	Which students need what help?
	Who among my students should work together?
	What grade should appear in the report card?

Parent	Is my child succeeding in school?
	What does my child need to succeed?
	Is my child's teacher(s) doing the job?
	Is this district doing the job?
Instructional Support Level	
Principal/Vice Principal	Is instruction in particular areas producing results?
	Is this teacher effective?
	What kinds of professional development will help?
	How shall we spend building resources to be effective?
Lead Teacher (mentor, support teacher, dept. chair)	What does this teacher need to do the job?
Counselor/Psychologist	Who needs special support services such as remedial programs?
	What students should be assigned to which teachers to optimize results?
Curriculum Director	Is our program of instruction effective?
Policy Level	
Superintendent	Are programs producing student learning?
	Is the building principal producing results?
	Which programs need/deserve more resources?

School Board	Are students in the district learning?
	Is the superintendent producing results?
State department of education	Are programs across the state producing results?
Citizen/legislator	Are students in our schools achieving in ways that will allow them to be effective citizens?

To ensure quality assessment, it is essential that multiple levels of professionals in education work together to ensure student academic success.

"Good teaching is inseparable from good assessing," states Wiggins (1992). Educators must reflect on what makes for good assessment, and why some forms of assessment are better than others. Views on assessment have been considerably altered in the last 15 years. For decades, assessment has mainly been used for accountability purposes (Ryan & Miyasaka, 1995). Alternative assessments provide far greater information, as it permits educators to evaluate not only student achievement, but also the quality of instruction.

One reason that significant changes have been made in the area of alternative assessments is in its link to school standards. School districts are responsible for establishing standards of academic achievement across the grade levels. Students are responsible for meeting these standards, while teachers are responsible for providing sufficient learning experiences that relate to each standard. One goal of the standards is that they can be applied regardless of ethnic group, socioeconomic group, or social class (Jasmine, 1993a). Darling-Hammond and Falk (1997) concur, "We must take care to ensure that new standards and assessments are responsive to the diverse cultural backgrounds and experiences of learners." As the standards must be something

that all students can achieve successfully, it reasons that a variety of assessment tools should be used for students to demonstrate their understanding. Reliance on only traditional assessments will not allow all students an equal opportunity for success. Darling-Hammond and Falk (1997) state, "Assessments tied to standards can provide important information to students, families, and communities about how students are progressing in their learning, and can be used to identify and address inequalities in access to learning opportunities." This supports the idea that assessments are not merely used to measure achievement, but also to indicate a lack of opportunities for students to demonstrate understanding.

There are criticisms, however, of the importance placed on students meeting or not meeting the standards. One argument is that much about the standards places the responsibility of learning almost entirely on the student (Darling-Hammond & Falk, 1997). If a student does not meet the standards, he or she is usually subject to consequences, while the teacher may not be affected. Consequences of not meeting academic standards may include grade retention or the withholding of a diploma in response to low achievement. This is not the goal of the standards, to punish students, but "the assumption by policymakers" according to Darling-Hammond and Falk (1997), "is that serious consequences will motivate children to achieve, and if they don't learn, they should keep repeating material until they do!" The solution to this, then, would be to provide greater opportunities for students to demonstrate their understanding, as opposed to punishment, for not demonstrating understanding in the particular assessment utilized.

The changes and trends in assessment practices further demonstrate the value of alternative assessments. "Changes in beliefs about what students should learn and how they can best be taught are influencing the way many students are assessed," expresses Ryan and Miyasaka (1995). Educators and policymakers are becoming much more aware that students learn

differently, and it is not fair to expect all students to demonstrate what they know in the same format. Darling-Hammond and Falk (1997) state, "There is a growing consensus that new assessments are needed to measure a broader range of abilities." Chittenden (1989) describes current trends in assessment practices as those that are ongoing, use open-ended formats, and draw upon a variety of settings. These elements will indeed provide greater opportunities for students to demonstrate understanding.

In regards to assessment, Teele (1996) summarizes, "The focus should be on multiple types of assessments." These types should include a combination of performance assessments and traditional testing. As students learn differently, if we truly want them to be successful, we need to assess them differently. Educators need to provide more options and greater opportunities for students to demonstrate growth and understanding.

Project Objectives and Processes

As a result of an assessment approach combining traditional assessments and alternative assessments, during the period of September 1998 to January 1999, the targeted classes will have increased opportunities to demonstrate knowledge and skills through the use of multiple forms of assessment, as evidenced by teacher observation checklists, student work samples, student interviews, and anecdotal records.

In order to accomplish the project outcomes the following processes are necessary:

1. Develop materials that provide a variety of opportunities for students to demonstrate knowledge and skills.
2. Develop learning activities that allow students to demonstrate and apply knowledge in a variety of forms.

3. Select the appropriate assessment tools to test student understanding of the content. This could be done through creating evaluation tools or utilizing text book author generated tests.

Project Action Plan

Action plan for the intervention:

I. Data collection to provide evidence of the problem

A. Complete observation checklists

B. Complete parent survey

C. Complete student survey

II. Implementing the interventions

A. Develop materials that provide a variety of opportunities for students to demonstrate knowledge and success.

1. Graphic organizers

a. KWL

b. Venn Diagram

c. Ranking Ladder

d. T-chart

e. Web

f. Mind map

g. P.M.I.

h. Pie chart

2. Tests

    a. Teacher created tests

    b. Textbook author generated tests

3. Product criteria

    a. Rubric

    b. Checklists

B. Develop learning activities that allow students to demonstrate and apply knowledge in a variety of forms.

1. Problem solving strategies

2. Higher order thinking skills

3. Using metacognitive strategies

C. Select the appropriate assessment tools to test student understanding of the content. This could be done though creating evaluation tools or utilizing textbook author generated tests.

1. Determine if content is basic or abstract

2. Determine learning modalities of students (comfort level/preferences)

3. Determine value of assessment tool as related to specific content area

CHAPTER FOUR

PROJECT RESULTS

Historical Description of Intervention

The objective of this project was to increase student opportunities to demonstrate their understanding of knowledge and skills. Graphic organizers, tests, rubrics, and checklists were developed and implemented to influence the desired changes. In addition, teachers also focused on the type of assessments: basic and abstract.

The intervention was implemented at two school sites. School Site A is an elementary school comprised of grades one through six. School Site B is a junior high school consisting of grades seven, eight, and nine. School Site A and School Site B are approximately three and one half miles apart, within the same district.

A variety of materials were implemented in the classroom. In addition to traditional tests, eight graphic organizers were utilized. Approximately one different graphic organizer was incorporated in the classroom every two weeks. Graphic organizers were completed independently, in small groups, or as a whole group based upon the desired outcome and subject matter. The targeted organizers implemented include a KWL (Know, Want to know, and

Learned), Venn diagram, Ranking Ladder, T-chart, Web, Mind Map, P.M.I. (Plus, Minus, and Interesting), and Pie Charts.

Graphic organizers were used in multiple situations for a variety of learning purposes. One use was as a review of subject matter. Graphic organizers were also useful as an assessment tool incorporated in a teacher created test. Students also completed organizers to link ideas and transition concepts across multiple subjects. Several graphic organizers such as the KWL and T-chart were well suited for use as an introduction to new material. While graphic organizers were most often used to organize content knowledge, social skills were also addressed and developed through the use of graphic organizers.

School Site A, an elementary site, used a KWL to organize information as to what the students know, what the students want to know, and after the completion of the unit, what the students learned. The KWL was used in social studies content areas including studies of Martin Luther King, Jr. and Native American Indians. School Site B, a middle school site, used a KWL to organize information for problem solving. It was also used in a class discussion to determine what the students knew about World War One prior to and after the unit of study (Appendix E).

School Site A used a Venn diagram to compare and contrast the characters in Little Red Riding Hood and Lon Po Po (Appendix F). School Site B used a Venn diagram to compare and contrast integers in a pre-algebra class (Appendix G). A Venn diagram was also used in a social studies class at Site B to compare and contrast the multiple facets of World War One and World War Two (Appendix H).

School Site A used a ranking ladder to demonstrate the steps of classroom consequences (Appendix I). A ranking ladder was also used to show the organizational steps needed to

complete a five-paragraph essay (Appendix J). School Site B used a ranking ladder to review and apply the order of operations to solve an algebra equation (Appendix K).

School Site A used a T-chart to identify characteristics of what lining up to leave the classroom should look like and sound like (Appendix L). School Site B used the T-chart to analyze what a cooperative learning environment should look like and sound like (Appendix M).

School Site A used a web as a tool to branch related ideas from one main concept. Webs were implemented into the school curriculum in both science and social studies units. The web completed in science focused on the order of the planets in the Solar System (Appendix N). The social studies web illustrated information learned during a Native American unit (Appendix O). School Site B used a web in social studies to expand the various components of geography such as climate, physical features, and location of landmarks (Appendix P).

School Site A used a mind map, a more complex and detailed web, as an introductory activity describing one's self at the start of the school year (Appendix Q). School Site B applied the mind map in a math lesson detailing how to multiply and divide fractions and decimals (Appendix R).

School Site A incorporated a P.M.I. chart which encourages the students to describe their positive (P), minus or negative (M), and interesting (I) reflections on an assignment. The P.M.I. was used after a social studies lesson in which the students recreated the globe on a balloon (Appendix S). School Site B also incorporated a P.M.I. after a geography unit, which involved collecting artifacts from different parts of the world (Appendix T).

School Sites A and B utilized a pie chart as well, the last of the eight graphic organizers. School Site A created a pie chart with an attached spinner in a study of probability

(Appendix U). School Site B created a pie chart to break down world population by continent compared to the world food supply by continent (Appendix V).

Tests were incorporated as needed throughout various units of study to determine students' knowledge and comprehension. Teacher created tests and textbook author generated tests were implemented as appropriate to the content being evaluated. Teacher created tests assessed knowledge and information gained through sources other than the textbook. This includes classroom discussions, extension activities, simulations, and material addressed from other sources.

Teachers at Site A and Site B documented the frequency and type of assessment used. It was first determined whether the content being assessed was basic or abstract (Appendix W). This determination often led to the decision as to if a teacher created or textbook author generated test would be used. Higher order thinking skills were incorporated into teacher created tests because of the limited number of questions that require higher order thinking skills in most textbook author generated tests. Teachers then documented the origin of the test. It was discovered that a test could also be partially student created, for example, when a Venn diagram is utilized in the assessment.

The learning modalities of students were also considered in choosing the appropriate assessment tool. Researchers considered and documented the comfort levels expressed by students in various assessment activities (Appendix X). This information gave an indication to teachers as to what forms of assessments students preferred. Question six from the original survey (question seven on the Site B survey) was given to students at the conclusion of the intervention to analyze if students' comfort levels had changed through the use of a variety of assessments.

Time constraints and curriculum goals also had a significant impact on the determination of assessment tools. Researchers had to ascertain that the objectives of the assessment aligned with state and district standards. Researchers also had to determine if the class time devoted to content and assessment was appropriate for the objectives being studied. It is important to note that the length of time spent on a lesson or unit of study was not altered for the sake of the research project.

Another component of the intervention was the development of learning activities and product criteria that allowed students to demonstrate and apply knowledge in a variety of forms. School Site A developed rubrics for several activities. An example includes the criteria needed for a well organized reading worksheet (Appendix Y). Other activities in which rubrics were developed and implemented include oral presentations, posters, and dioramas. School Site B also developed rubrics for several activities. Examples include the criteria required for developing a board game in the study of World War I (Appendix Z). Other activities for which rubrics were developed and implemented include written reports, oral presentations, and visual products.

Checklists were used as a simplified rubric to evaluate product criteria. An example at School Site A includes an umbrella outline to delineate the components of a five-paragraph essay (Appendix AA). School Site B used checklists in math to guide the problem solving process write up (Appendix BB).

Problem solving strategies were addressed through a variety of activities at school Sites A and B. Some of the strategies that were addressed include making lists and tables, illustrations, role-playing, looking for shortcuts, working backwards, and looking for key words. Many of these strategies were incorporated across the curriculum.

Higher order thinking skills were also addressed to promote many levels of thinking. This was done in learning activities and selected assessment forms. The levels of thinking that were addressed include explaining, evaluating, applying, classifying, and justifying. Researchers attempted to address many of the levels in various activities.

Metacognitive strategies were used at both sites during the interventions to encourage students to think about and reflect upon their learning processes. This was primarily done through reflective journals, oral discussions, and forms evaluating student comfort levels.

Presentation and Analysis of Results

Researchers collected, recorded, and analyzed data in several categories to determine the effectiveness of implementations. Data from the incorporation of graphic organizers was collected in relation to student preferences. This was done through the use of an evaluation form. Data on formats and sources of assessments were recorded in an "Assessment Use Log" by researchers. Researchers recorded data on both students' comfort level with each specific learning activity, as well as each specific assessment tool. These tools were developed to assess the respective learning activity. The final component of data in the intervention involves the results of a post-survey on students' assessment preferences.

The following data and figures illustrate student comfort levels on the eight graphic organizers that were incorporated throughout the intervention. Students at both sites completed an evaluation form pertaining to their comfort level when asked to perform various tasks.

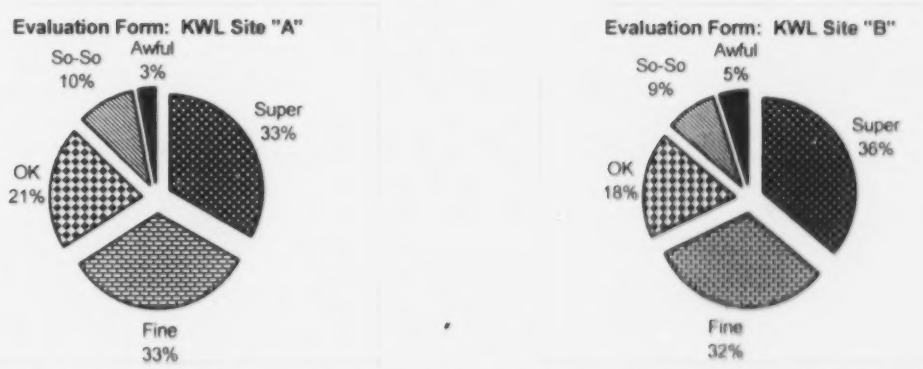


Figure 9. Students' reflection upon completion of a KWL graphic organizer at Site A and Site B.

This data illustrates that students favored a KWL as an assessment tool. At School Site A, a combined total of 66% of the responses were "super" or "fine", whereas 13% of the responses were "so-so" or "awful". School Site B obtained similar results with 68% of the responses as "super" or "fine", whereas 14% of the responses were "so-so" or "awful". This illustrates that students are very comfortable demonstrating knowledge in this format.

Figure 10. Students' reflection upon completion of a Venn diagram graphic organizer at Site A and Site B.

Figure 10 suggests that students at Sites A and B were generally comfortable completing a Venn diagram. The students at School Site A responded favorably with 75% of the responses in

the "super" or "fine" categories, whereas 10% of the responses were in the "so-so" or "awful" categories. The students at School Site B responded less favorably with 31% in the "super" or "fine" categories. Almost half of the responses (45%) were "so-so" or "awful".

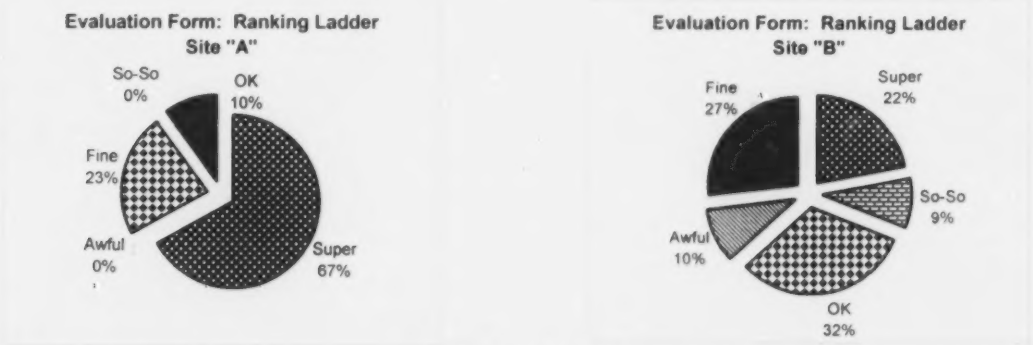


Figure 11. Students' reflection upon completion of a Ranking Ladder graphic organizer at Site A and Site B.

By far, students at Site A preferred the ranking ladder with 90% of the responses in the "super" or "fine" categories. There were zero responses in the "so-so" and "awful" categories. Less than half of the students at School Site B responded "super" or "fine" (49%). Nineteen percent of the students at School Site B responded "so-so" or "awful".

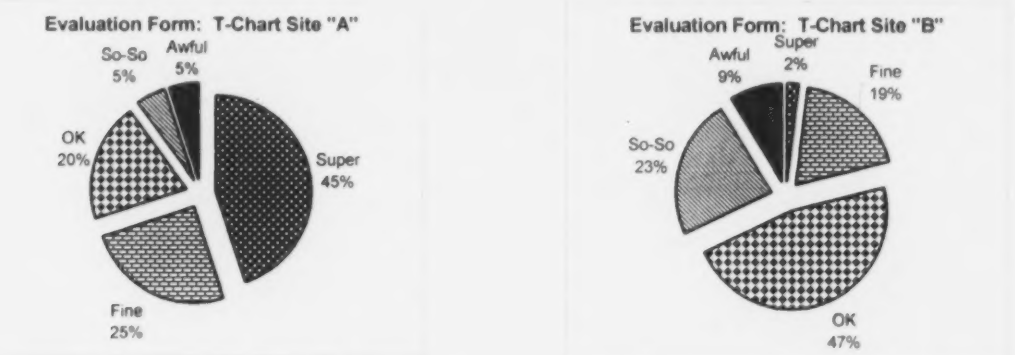


Figure 12. Students' reflection upon completion of a T-Chart graphic organizer at Site A and Site B.

By an overwhelming margin, students at Site A preferred the T-chart to students at Site B. Seventy percent of the students at School Site A responded with "super" or "fine", whereas 10% of the students responded "so-so" or "awful". Students at School Site B responded with 21% in the "super" or "fine" categories, whereas 32% responded "so-so" or "awful".

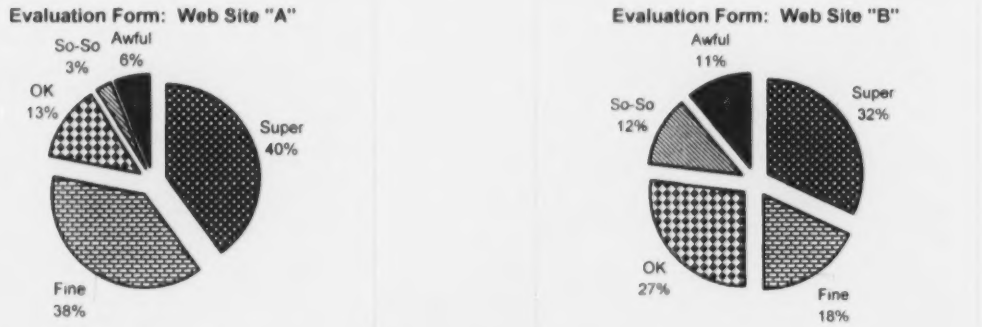
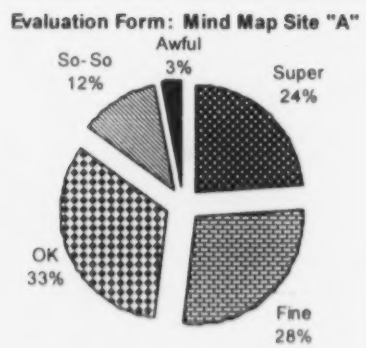


Figure 13. Students' reflection upon completion of a Web graphic organizer at Site A and Site B.

Students at both sites indicated a strong comfort level when completing a web. Seventy-eight percent of the students at School Site A responded "super" or "fine". Only 9% of the students at Site A responded "so-so" or "awful". Fifty percent of the students at School Site B responded "super" or "fine". Twenty-three percent of these students responded "so-so" or "awful".



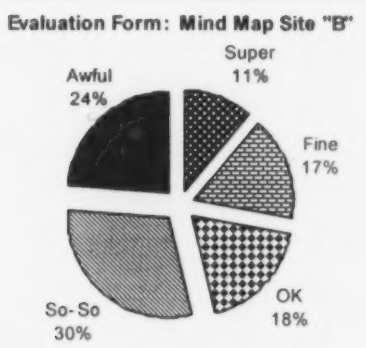
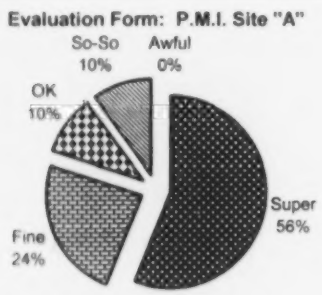


Figure 14. Students' reflection upon completion of a Mind Map graphic organizer at Site A and Site B.

Fifty-two percent of the responses at School Site A were "super" or "fine", whereas only 15% of the responses fell into the "so-so" or "awful" categories. At School Site B, 28% of the students responded "super" or "fine", whereas 38% of the students responded "so-so" or "awful".



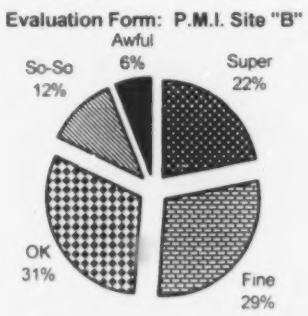


Figure 15. Students' reflection upon completion of a P.M.I. graphic organizer at Site A and Site B.

Students at School Site A thought highly of the P.M.I. with 80% of the responses "super" or "fine". Ten percent of the responses were "so-so" while no responses were "awful". Fifty-one percent of the students at Site B evaluated the P.M.I. as "super" or "fine". Eighteen percent of the students responded "so-so" or "awful".

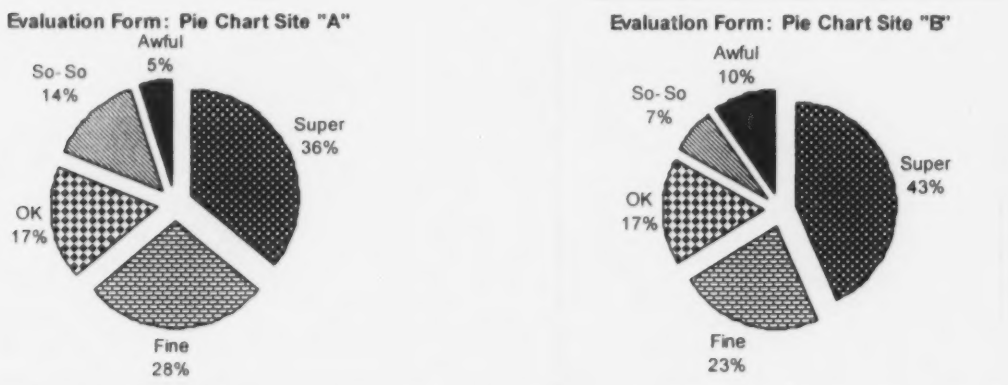


Figure 16. Students' reflection upon completion of a Pie Chart graphic organizer at Site A and Site B.

Students' responses upon completion of a pie chart were similar at School Site A and School Site B. Sixty-four percent of the students responded "super" or "fine" at School Site A. Nineteen percent of the students responded "so-so" or "awful". Sixty-six percent of the students at School Site B responded "super" or "fine". Seventeen percent of the students responded "so-so" or "awful".

Of the eight graphic organizers utilized to broaden assessment opportunities, the KWL, web, and pie chart ranked favorably at both sites. Site A, an elementary school, also indicated strong preferences towards the ranking ladder, T-chart, and P.M.I. The differences in data between Site A and Site B suggest that the elementary students at Site A are more responsive to graphic organizers.

In addition to graphic organizers, the variety of assessments was also analyzed. Throughout the intervention, researchers used an "Assessment Use Log" (Appendix W) to record data on the types of tests administered and the source of the assessment. The types of tests were categorized as basic and abstract. Tests originated from three main sources; textbook author generated, teacher created, and student created.

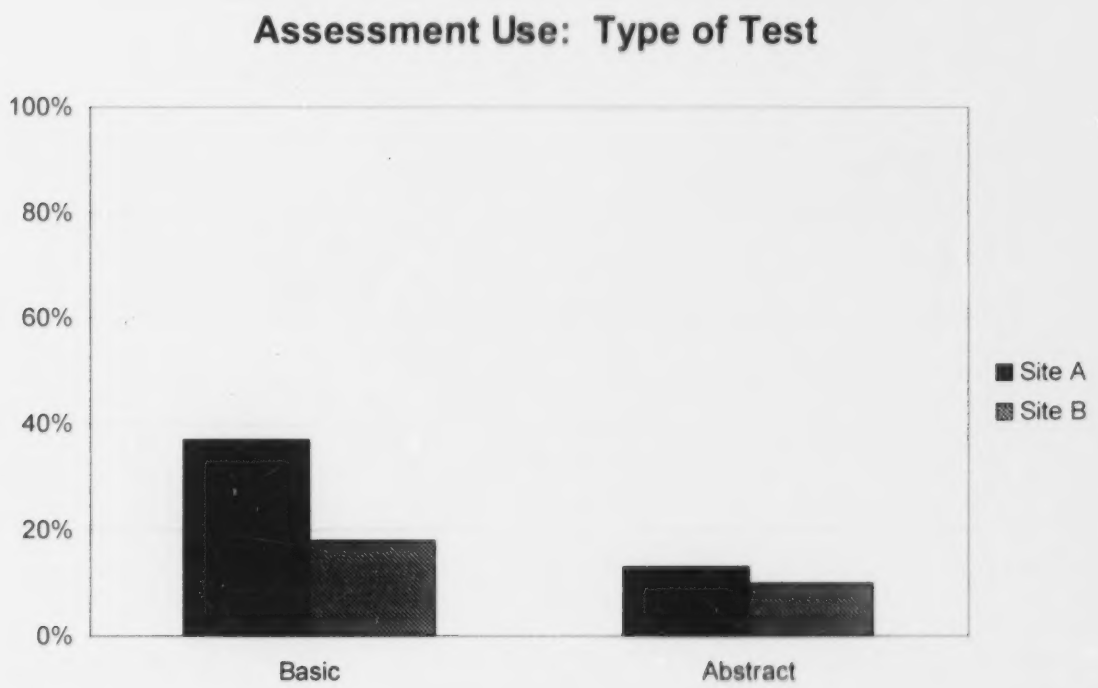


Figure 17. Quantity of basic and abstract assessments given at Site A and Site B during the first semester of the 1998-1999 school year.

Assessments given at both sites were predominately basic. These tests focused on questions that involved recall, identification, and explanation of content. At Site A, 37 of the 50 tests administered were of this type. At Site B, 18 of the 28 tests administered were basic. Abstract assessments were administered less frequently. These tests focused on the application,

synthesis, and evaluation of content, knowledge, and skills. At School Site A, 13 of the 50 tests administered were abstract. At School Site B, 10 of the 28 tests administered were also abstract.

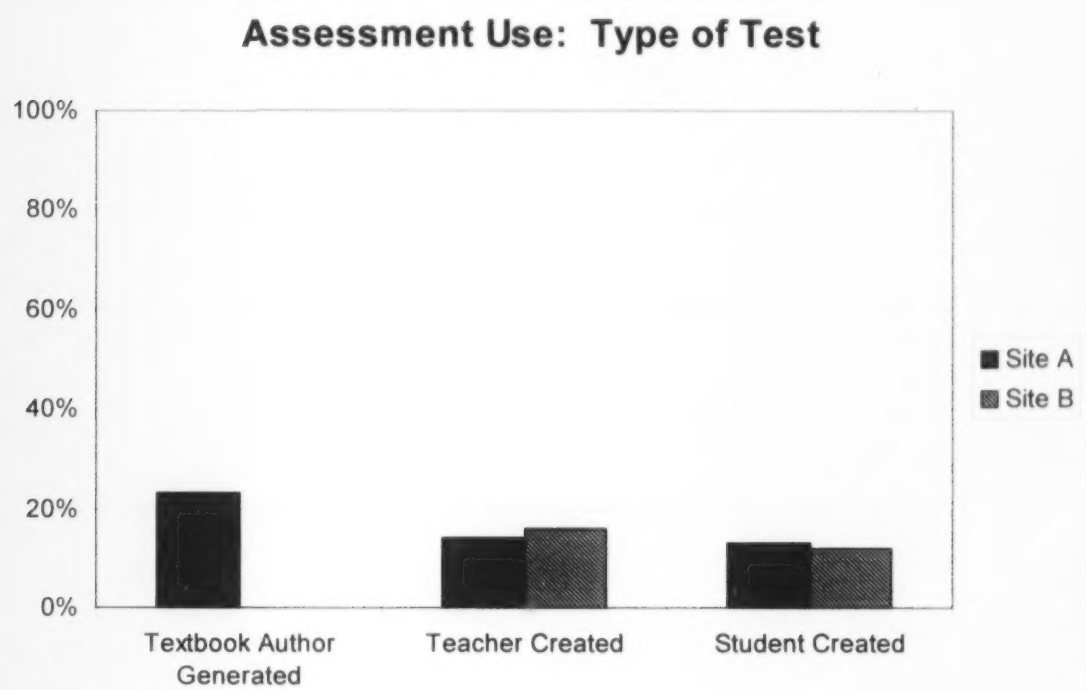


Figure 18. Quantity of textbook author-generated, teacher-created, and student-created assessment given at Site A and Site B during first semester 1998-1999.

Figure 18 illustrates the source of an assessment. Twenty-three of the fifty tests administered at School Site A were textbook author generated tests. The majority of these assessments were given in mathematics. Site B utilized zero textbook author generated tests.

Teacher created tests were frequently given at both sites. School Site A administered 14 teacher created tests, while School Site B administered 16 tests of this type. Teacher created tests were developed to assess additional material from classroom discussions and learning activities in conjunction with textbook material.

Teachers initiated student-created tests as a form of assessment. Students then created a product demonstrating knowledge and skills, thus making the assessment student created. Thirteen of the fifty tests administered at School Site A were student created. Twelve of the twenty-eight tests given at School Site B were of this type.

Researchers recorded data on both students' comfort levels with specific learning activities, as well as on specific assessment tools. In multiple learning activities across the curriculum, teachers provided students with specifications as to how a product must be completed as a culmination of the activity.

Students at Site A utilized a rubric (Appendix Y) on a reading activity. The product was a book report on any story appropriate to the students' reading ability level. Students then reflected on their comfort with the criteria established through the given rubric. Overall students responded fairly neutral towards the rubric, as 64% ranked it as "OK". Fourteen percent of the students responded with a "so-so" as did the same percentage towards "fine". Eight percent felt uncomfortable with the rubric, ranking it as "awful". No students responded with "super".

As a major component of paragraph and essay writing, students a Site A used an umbrella checklist (Appendix AA) to delineate the components of a proper paragraph. The researcher reported that students often complained about completing the umbrella planner. However, when asked to evaluate its usefulness, students responded favorably. Eighteen percent ranked it as "super". A majority thought it was "fine" at 59%. Fourteen percent ranked it as "OK" and two percent thought it was "so-so". None of the students ranked it as "awful". It is apparent that students understand the value of the checklist in writing a successful paragraph.

In a social studies class at Site B, students were given a rubric to guide the development of a written report (Appendix CC) as well as an oral report (Appendix DD) on a 1920's topic.

Students completed the written and oral reports and were then asked to evaluate their comfort level as to the usefulness of the rubric. Half of the students evaluated the written rubric "super" or "fine", with 21% and 29%, respectively. Twenty-five percent of the students thought the rubric was "OK". Seventeen- percent thought it was "so-so", and only eight percent thought it was "awful".

Students at Site B were overall more comfortable with the rubric for the oral report on the 1920's. More than half of the students ranked it as "fine" or "super", 39% and 18%, respectively. Twenty-three percent thought it was "OK". Less than one quarter of the students evaluated the rubric poorly with five percent "awful" and 15% "so-so".

The final component of data in the intervention involves the results of a post survey of students' assessment preferences. The following data and figures illustrate students' preferences towards a variety of assessments. The post survey was administrated in class at Site A and Site B in March of 1999.

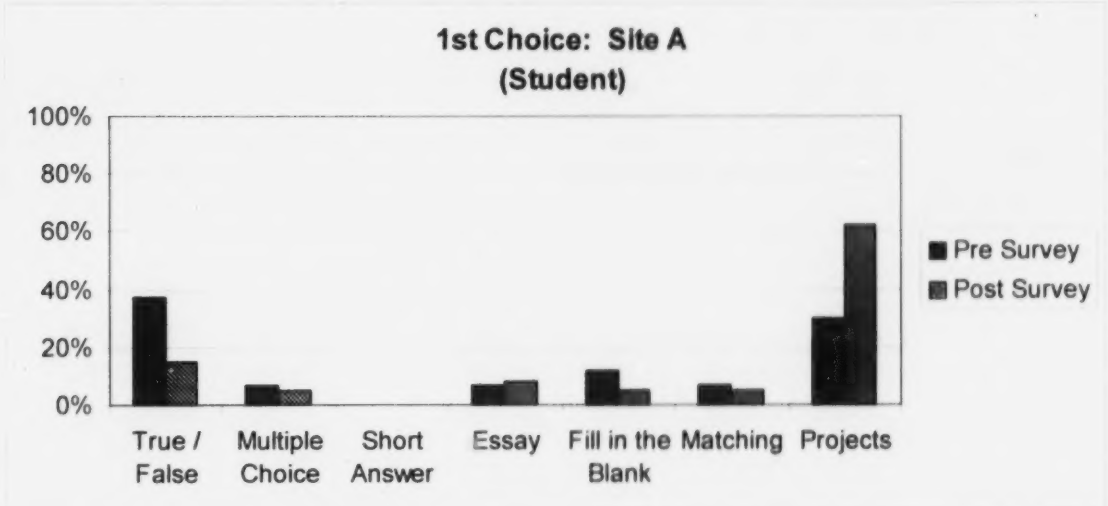


Figure 19. First choice of assessment preferences among students in a post-survey administered in class at Site A in March 1999 compared to a pre-survey given in September 1998.

Figure 19 illustrates minor differences at Site A between the pre-survey and post-survey. The obvious difference is the preference towards fill in the blank, which changed from 12% in the pre-survey to 5% in the post-survey. Multiple choice declined slightly from 10% in the pre-survey to 5% in the post-survey. Projects doubled from 30% to 62%. This suggests that students at Site A feel more comfortable with the amount of knowledge and skills that can be demonstrated through a project.

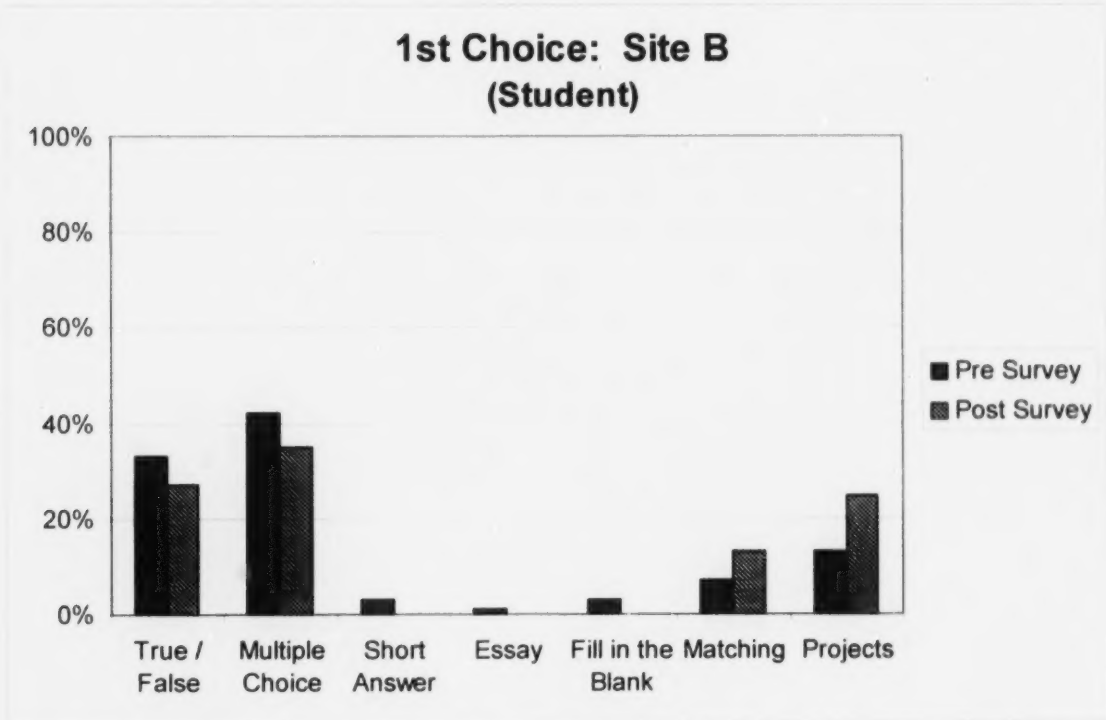


Figure 20. First choice of assessment preferences among students in a post-survey administered in class at Site B in March 1999 compared to a pre-survey given in September 1998.

Figure 20 illustrates that although students at Site B still prefer true/false and multiple choice over other assessments, comfort levels did increase with matching and projects. The change for true/false and multiple choice was significant. True-false results declined from 33% in the pre-survey to 27% in the post-survey. Multiple choice dropped from 42% in the pre-

survey to 35% in the post-survey. However, the increase in preferences towards projects nearly doubled from 13% to 25%.

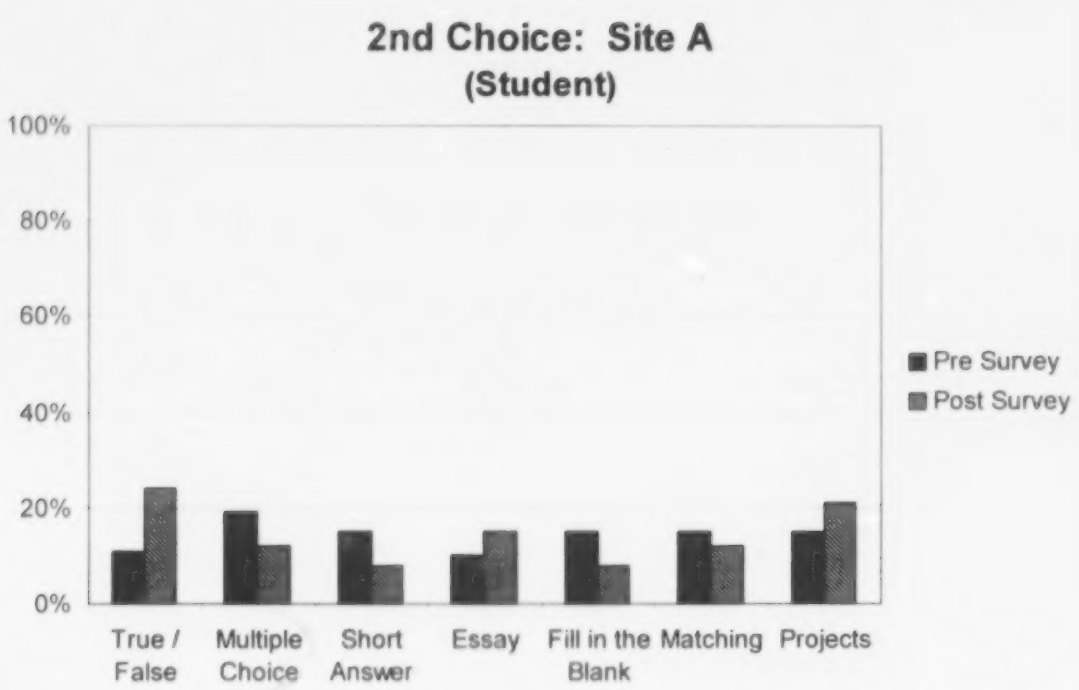


Figure 21. Second choice of assessment preferences among students in a post-survey administered in class at Site A in March 1999 compared to a pre-survey given in September 1998.

Figure 21 illustrates a general decrease in preferences towards assessments that require a lower level of cognition such as multiple choice, short answer, fill in the blank, and matching. These categories of preferences decreased from 19% to 12 % in multiple choice, 15% to 5% in short answer, 15% to 8% in fill in the blank, and 15% to 12% in matching. Preferences towards projects and true/false increased from 15% to 21% and 11% to 24%, respectively.

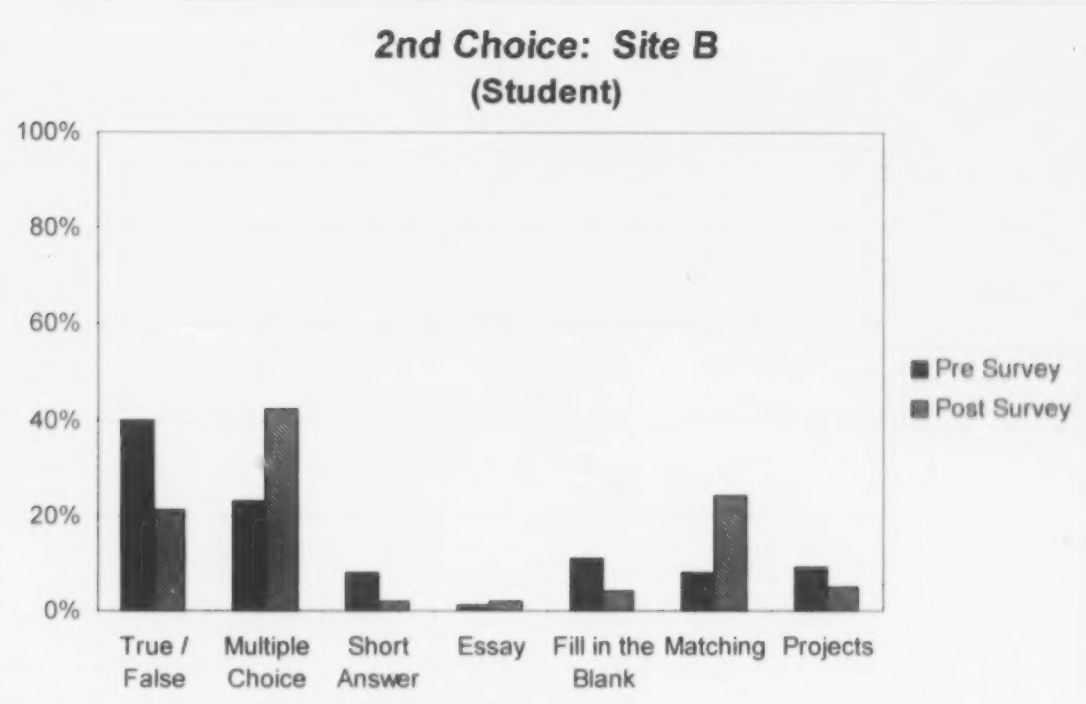


Figure 22. Second choice of assessment preferences among student in a post-survey administered in class at Site B in March 1999 compared to a pre-survey given in September 1998.

Although multiple choice assessments remained a favorite, true-false assessments decreased and matching increased significantly. The true-false responses decreased from 40% in the pre-survey to 21% in the post-survey. Matching responses tripled, increasing from 8% in the pre-survey to 24% in the post-survey.

In chapter two, pre-survey results were analyzed for students' sixth and seventh choices as well. Data for the sixth and seventh choices among post-survey assessments did not apply in the analysis of the intervention. Since the intervention focused on the increase in comfort students felt towards different forms of assessments, the sixth and seventh choices were not applicable. This is due to the fact that the sixth and seventh choices are unfavorable responses.

Conclusions and Recommendations

Based on the presentation and analysis of the data on graphic organizers, types and sources of tests, learning activities, product criteria which included rubrics and checklists, and post-survey results, the students showed an increase in comfort while demonstrating their understanding of knowledge and skills. Comfort was defined as the students' confidence in their ability to demonstrate knowledge and skills.

There were several strengths that emerged during the intervention that affected both students and teachers. One strength was that students had increased opportunities to demonstrate higher order thinking skills. During classroom discussion and learning activities, students were frequently asked to match, name, and recall specific content matter. However, through the use of graphic organizers and more in-depth questioning strategies, students were able to demonstrate higher order thinking skills using application, evaluation, and prediction of the subject matter. The major benefits of higher order thinking shown by students is that teachers can evaluate the students' grasp of specific content and witness what a child may apply beyond the content being assessed.

Another strength of the intervention was the incorporation of reflection and metacognition. As researchers used evaluation forms for students to indicate their comfort level on a given task, activity, or product, students were expected to reflect on their feelings. Students had to determine if they were given a genuine chance to best demonstrate their level of knowledge. This type of metacognition aimed to get students to not merely take a test, but to think about the effectiveness of the assessment and its appropriateness to the content being studied. Students' input allowed teachers to also reflect on the value of a given assessment. If students generally

responded with discomfort, the teacher could then re-examine the presentation of material and choice of assessment.

Another significant strength of the intervention was the greater awareness researchers gained on the variety and value of multiple forms of assessments. One major component of the intervention was the development of traditional and alternative assessments. Researchers created multiple assessments because it was evident from the literature reviewed that all students do not learn the same way, so it would not be beneficial to assess them the same way. Howard Gardner's formulation of the Multiple Intelligences focuses on the adaptations that can be made in learning so that students can best process information and demonstrate their knowledge and understanding in a way that is most suitable to their learning styles. Throughout the intervention, a variety of learning activities and products were incorporated to benefit all students. As researchers utilized teacher created, textbook author generated, and student created tests, it was more evident the benefits and weaknesses of the assessment types and the determination of which would be most suitable. As the intervention continued, researchers realized the importance of choosing an appropriate assessment. This choice became easier as the study progressed. Researchers are now more confident in the way they assess students and will continue to incorporate numerous assessments in the future.

Several weaknesses of the intervention surfaced. Overall, the weaknesses were minor and should be noted by future researchers.

The duration of the intervention was one weakness. Researchers questioned the authenticity of results in a four-month period. In future studies, multi-year research would most likely yield more accurate results, as greater assessment opportunities would present themselves.

One other concern recognized by researchers is the likeliness of bias. Researchers questioned whether students' reactions were affected by the fact that the researchers were also the classroom teachers. Researchers speculated that the students might have tried to please teachers by giving responses that teachers were anticipating. Although bias was not documented, it is important to consider in future studies.

A weakness that may be unique to this study is the effect of the age differences of students involved. Elementary students at Site A responded favorably to the assessments. Perhaps this is due to the "newness" of the activity and the eagerness of children at a younger age. The junior high students at Site B were generally less enthused. This may be related to the pubescent changes they are undergoing. Typically, students at this age are more focused on socialization and peer acceptance. Academic endeavors are less of a priority. This may account for the general unresponsiveness to the activities in the intervention. In future studies, it may be more beneficial to focus on students closer in age and interests.

There are several elements of the intervention that future researchers should consider in the replication of this project. First, it is recommended that teachers have a solid background in the theory of assessment and knowledge of the multiple learning perspectives. As cited in chapter two, one probable cause of limited assessment opportunities is the lack of teacher training in evaluation. At first researchers were apprehensive of trying different assessments in the classroom because of their limited training. Researchers felt a greater need for instruction on the creation of assessments and the authenticity of assessments that were to be utilized. This weakness was combatted by the nature of the intervention, as researchers had to become familiar with and adept with using a variety of assessments that met curricular guidelines.

It is also suggested that students involved in the action research have sufficient reading and writing abilities. Many of the learning activities and products created, required reading and writing skills. If implemented with a younger age group (Pre-K, first grade), many of the activities would need to be done orally. As this is difficult to do individually, whole group activities would transpire. This would not give sufficient demonstration of an individual's knowledge and skills.

Researchers recommend one modification that is crucial to the authenticity of demonstration of knowledge and skills. The emphasis needs to be on the opportunities for students to exhibit understanding, with student comfort being of less importance. Although student enjoyment is important in a positive learning environment, learning is the ultimate goal. In future studies, more data should be collected and analyzed in regards to the depth of student understanding.

In conclusion, student assessment opportunities were expanded due to the increased efforts of the researchers. The implementation of this action research stresses the need for teachers to exert greater efforts to ensure student learning. As stated by Grant Wiggins (1992) "Good teaching is inseparable from good assessing." As beginning researchers nine months ago, we were forced to use alternative assessments for which we were not adequately prepared. Now we would not teach without them.

WORKS CITED

Anderson, S., Ball, S., Murphy, R., and associates. (1975). Encyclopedia of Educational Evaluation. San Francisco: Jossey-Bass.

Archbald, D. A., & Newmann, F. M. (1988). Beyond Standardized Testing: Assessing Authentic Academic Achievement in the Secondary School. Madison: University of Wisconsin, National Association of Secondary School.

Bellanca, J. & Fogarty, R. (1991). Blueprints for Thinking in the Cooperative Classroom. Arlington Heights, IL: IRI/Skylight Training and Publishing, Inc.

Burke, K. (1994). How to Assess Authentic Learning. (Rev. ed.). Arlington Heights, IL: IRI/Skylight Training and Publishing, Inc.

Chapman, C. (1993). If the Shoe Fits... How to Develop Multiple Intelligences in the Classroom. Arlington Heights, IL: IRI/Skylight Training and Publishing, Inc.

Chittenden, E. (1989). Authentic assessment, evaluation, and documentation of student performance. Expanding Student Assessment. Alexandria, VA: Association for Supervision and Curriculum Development.

Cizek, G. (1995, November 25). The big picture in assessment and who ought to have it. Phi Delta Kappan, 77, 246-249.

Clark, S. & Clark, D. (1998). Authentic assessment-key issues, concerns, guidelines. Schools in the Middle 6, 50-51.

Combs, D. (1997, September). Using alternative assessment to provide options for student success. Middle School Journal, 29,

Darling-Hammond, L. & Falk, B. (1997, November). Using standards and assessments to support student learning. Phi Delta Kappan, 79, 190-199.

Gardner, H. (1983). Frames of Mind: The Theory of Multiple Intelligences. New York, NY: Basic Books.

Gardner, H. (1995, November). Reflections on Multiple Intelligences: myths and messages. Phi Delta Kappan, 77, 200-209.

Gilman, D.A., Andrew, R. & Rafferty, C. (1995, October). Making assessment a meaningful part of instruction. NASSP Bulletin, 79, 20-24.

Harlem Junior High School, Harlem Unit District 122. (1997). 1997 School Report Card. (Publication No. 0410112201005). Loves Park, IL .

Harlem School District Home Page. [On-line}. Available: http://harlem.winbgo.k12.il.us/

Helm, J.H., Beneke, S., &Steinheimer, K. (1998). Windows on Learning, New York, NY: Teachers College Press.

Higgins, K. , & Heglie-King, A. (1997, September). Giving voice to middle school students through portfolio assessment: a journey to mathematical power. Middle School Journal, 29,

Hills, J.R. (1991, March). Apathy concerning grading and testing. Phi Delta Kappan, 540-545.

Hoerr, T. (1996). Introducing the theory of Multiple Intelligences. Bulletin, 80, 8-10.

Howard, P. (1994). The Owner's Manual for the Brain. Austin, TX: Leorian Press.

Jasmine, J. (1993a). Portfolios and Other Assessments. Huntington Beach, CA: Teacher Created Materials, Inc.

Jasmine, J. (1993b). Portfolios and Other Assessments. Huntington Beach, CA: Teacher Created Materials, Inc.

Jordan, A. (1996). Multiple intelligences: seven keys to opening closed minds. Bulletin, 80, 29-35.

Marcus, S.A., & McDonald, P. (1990). Tools for the Cooperative Classroom. Palatime, IL: IRI/Skylight Training and Publishing, Inc.

Neill, M. & Medina, N. (1989, May). Standardized testing: harmful to educational health. Phi Delta Kappan, 70,688-697.

North Central Regional Educational Laboratory (NCREL). (1991a). Schools that Work: The Research Advantage. (Guidebook #4, Alternatives for Measuring Performance). Oak Brook, IL: Author.

North Central Regional Educational Laboratory (NCREL). (1991b). Alternative assessment: Policy beliefs. No. 15 & 16. Oak Brook, IL: Author

Ralston Elementary School, Harlem Unit District 122. (1997). 1997 School Report Card. (Publication No. 0410112202010). Machesney Park, IL.

Reckase, M. (1995, October). Practical experiences in implementing a national portfolio model in the high school level. NASSP bulletin, 79, 31-36.

Reedy, R. (1995, October). Formative and summative assessment: a possible alternative to the grading-reporting dilemma. NASSP Bulletin, 79, 47-51.

Ryan, J. M., & Miyasaka, J. R. (1995 October). Current practices in testing and assessment: what is driving the changes? NASSP Bulletin, 79, 1-10.

The School Code of Illinois and Related Laws. (1996). St. Paul, MN: West Publishing Co.

School District Profile, Harlem, Illinois, U.S. (Health Systems Research). Rockford, IL: The University of Illinois College of Medicine at Rockford.

Schurr, S. (1998). Teaching, enlightening a guide to student assessment. Schools in the Middle, 6, 22-31.

Stiggins, R. J. (1985 October). Improving assessment where it means the most: In the Classroom. Educational Leadership. 69-74.

Stiggins, R. J. (1994). Student-Centered Classroom Assessment. Columbus, OH: Merrill.

Stiggins, R. J. (1995, October). Professional development: the key to a total quality assessment environment. NASSP Bulletin, 79, 11-19.

Smagorinsky, P. (1996). Multiple intelligences, multiple means of composing: an alternative way of thinking about learning. Bulletin, 80, 11-17.

Sternberg, R. (1996). I.Q. counts, but what really counts is successful intelligence. Bulletin, 80, 18-23.

Steele, D. & Arth, A. (1998). Instruction and assessment: preventing anxiety, promoting confidence. Schools in the Middle, 6, 44-48.

Teele, S. (1996). Redesigning the educational system to enable all students to succeed. Bulletin, 80, 65-75.

Winnebago County Communities and Townships Population and Estimates (Health Systems Research). Rockford, IL: The University of Illinois College of Medicine at Rockford.

Wiggins, G. (1992, May). Creating tests worth taking. Educational Leadership, 26-33.

Zessoules, R. & Gardner, H. (1991). Authentic assessment: beyond the buzzword. Expanding Student Assessment. Alexandria, VA: Association of Supervision and Curriculum Development.

APPENDICES

I am currently working towards my Master's Degree in Education. One component of my program is to develop an action research project. This survey is part of my data collection. I am interested in learning parents' and students' opinions regarding tests.

Please take a few minutes to complete this survey. Your child will also be taking a similar survey in class. Thank you for your cooperation.

Parent Survey

Please circle the one (1) answer that best represents your opinion.

1. IF YOUR BOSS TOLD YOU THAT TOMORROW YOU HAD TO TAKE A TEST ALL DAY, WHAT WOULD YOUR FEELINGS BE?

   A. relieved; no work
   B. sick to your stomach
   C. it doesn't matter as long as I still get paid
   D. take a sick day

2. BEFORE TAKING A TEST, I AM NERVOUS

   A. always
   B. usually
   C. sometimes
   D. never

3. HOW DOES YOUR CHILD PREPARE FOR A TEST?

   A. re-read chapters
   B. studies notes
   C. doesn't study
   D. I am not sure

4. HOW OFTEN DO YOU HELP YOUR CHILD PREPARE FOR A TEST?

   A. always
   B. usually
   C. sometimes
   D. never

5. WHAT KIND OF TEST DOES YOUR CHILD TAKE MOST OFTEN IN SCHOOL?

A. multiple choice / true-false
B. fill in the blank
C. essay
D. I am not sure

6. WHAT ARE YOUR TEST PREFERENCES? RANK YOUR FAVORITE (1) TO LEAST FAVORITE (7). PLEASE PUT A NUMBER BY EACH CHOICE.

_____ True-false

_____ Multiple Choice

_____ Short Answer

_____ Essay

_____ Fill in the Blank

_____ Matching

_____ Projects

7. I THINK TESTS ARE THE BEST WAY TO SHOW WHAT MY CHILD KNOWS

true false

Name (optional) _____

I am currently working towards my Master's Degree in Education. One component of my program is to develop an action research project. This survey is part of my data collection. I am interested in learning parents' and students' opinions regarding tests.

Please take a few minutes to complete this survey. Your child will also be taking a similar survey in class. Thank you for your cooperation.

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   B. usually
   C. sometimes
   D. never

5. WHAT KIND OF TEST DOES YOUR CHILD TAKE MOST OFTEN IN SCHOOL?

   A. multiple choice / true-false
   B. fill in the blank
   C. essay
   D. I am not sure

6. THE IMPORTANCE PLACED ON TESTS IN SCHOOL IS...

   A. too much
   B. not enough
   C. just right
   D. I am not sure

7. WHAT ARE YOUR TEST PREFERENCES? RANK YOUR FAVORITE (1) TO LEAST FAVORITE (7). PLEASE PUT A NUMBER BY EACH CHOICE.

   _____ True-false

   _____ Multiple Choice

   _____ Short Answer

   _____ Essay

   _____ Fill in the Blank

   _____ Matching

   _____ Projects

8. IF GIVEN THE CHOICE, MY CHILD WOULD PREFER TAKING A TEST INSTEAD OF COMPLETING A PROJECT

   true false

9. I THINK TESTS ARE THE BEST WAY TO SHOW WHAT MY CHILD KNOWS

   true false

Name (optional) _____

Please take a few minutes to complete this survey. As part of a research project, I am interested in learning parents' and students' opinions regarding tests. Thank you for your cooperation.

Student Survey

Please circle the one (1) answer that best represents your opinion.

1. IF YOUR TEACHER TOLD YOU THAT TOMORROW YOU HAD TO TAKE A TEST ALL DAY, WHAT WOULD YOUR FEELINGS BE?

   A. relieved, no work
   B. sick to your stomach
   C. I don't care
   D. take a sick day

2. BEFORE TAKING A TEST, I AM NERVOUS

   A. always
   B. usually
   C. sometimes
   D. never

3. HOW DO YOU PREPARE FOR A TEST?

   A. re-read chapters
   B. study notes
   C. study with a friend
   D. I don't study

4. HOW OFTEN DO YOUR PARENTS HELP YOU PREPARE FOR A TEST?

   A. always
   B. usually
   C. sometimes
   D. never

5. WHAT KIND OF TEST DO YOU TAKE MOST OFTEN IN SCHOOL?

   A. multiple choice / true-false
   B. fill in the blank
   C. essay
   D. matching

6 WHAT ARE YOUR TEST PREFERENCES? RANK YOUR FAVORITE (1) T LEAST FAVORITE (7). PLEASE PUT A NUMBER BY EACH CHOICE.

_____ True-false

_____ Multiple Choice

_____ Short Answer

_____ Essay

_____ Fill in the Blank

_____ Matching

_____ Projects

Name (optional) _____

Please take a few minutes to complete this survey. As part of a research project, I am interested in learning parents' and students' opinions regarding tests. Thank you for your cooperation.

Student Survey

Please circle the one (1) answer that best represents your opinion.

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   A. multiple choice / true-false
   B. fill in the blank
   C. essay
   D. matching

6. THE IMPORTANCE PLACED ON TESTS IN SCHOOL IS...

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_____ True-false

_____ Multiple Choice

_____ Short Answer

_____ Essay

_____ Fill in the Blank

_____ Matching

_____ Projects

8. I THINK TESTS ARE THE BEST WAY TO SHOW WHAT I KNOW

true false

Name (optional) _____

*** Where did you go to school for Sixth Grade?** _____

OBSERVATION CHECKLIST

Activity _____ **Date** _____

Student Name	Stays on task	Displays off task behaviors	Inattentive	Demonstrates knowledge of subject matter	Appropriate use of assessment tool	Additional comments

Appendix C Fig. 1

Appendix C Fig. 2

OBSERVATION CHECKLIST

Activity Integer Presentations Date 9/30 + 10/2 5th

Student Name	Stays on task	Displays off task behaviors	Inattentive	Demonstrates knowledge of subject matter	Appropriate use of assessment tool	Additional comments
Walter [redacted]		✓		+	✓	
James [redacted]	+			+	+	worked well with others
Brittany [redacted]	+			+	+	
Robert [redacted]	+			+	+	
Nicole [redacted]	+			+	+	Artistic
Stefan [redacted]	+			+	+	Consciencious ~ stays on task
Jared [redacted]	+			✓	+	
Rigo [redacted]	+			+	+	
Nick [redacted]	+			+	+	
Liz [redacted]	+			+	+	Great speaking voice
Rachel [redacted]	+			+	+	

+ yes (pos) ✓ yes (neg) ✓ yes (neg) + good ✓ average − not good + good ✓ average − not good

Know	Want to Know	Learned

Name _____ Subject _____

Know	Want to Know	Learned
big continent Nile River Egypt has jungles Sahara desert as big as U.S. lions, tigers, giraffes, hippos African safaris pyramids Ethiopia, poor countries endangered animals	what foods people eat? where do people live? what kinds of houses? population why don't they grow more food? what kind of clothes do they wear? poachers? what animals are endangered Biggest cities	4 major climates Mt Kilimanjaro - highest point Kente cloth Kwanza celebrations Chimpanzees in the wild Jane Goodall & study Ngorongoro major rivers Great Rift Valley apartheid - South Africa Africa is mostly grasslands Shaka - Zulu nation

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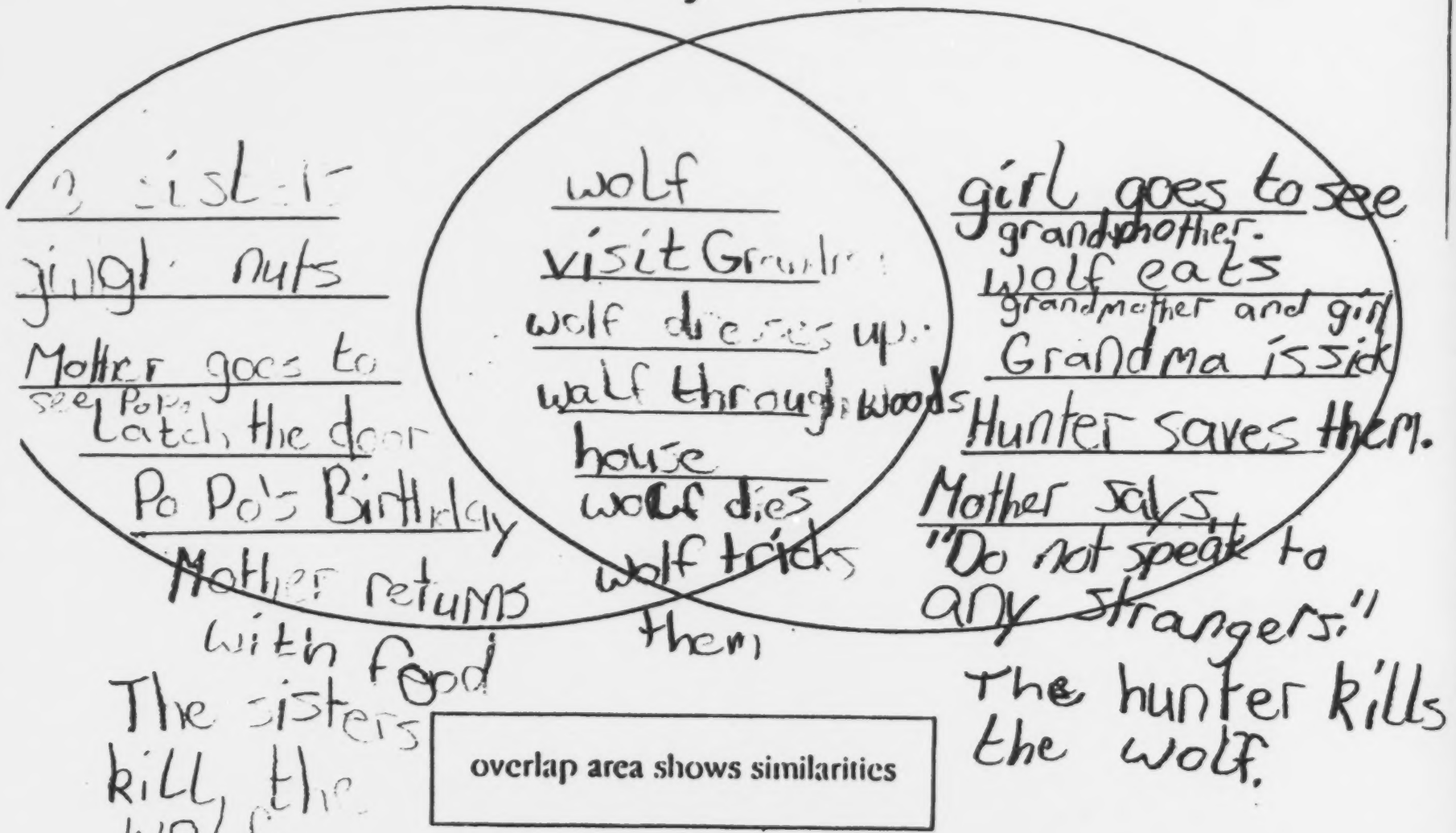
Katie A

Lon Po Po : sun Red Riding Hood



Appendix F

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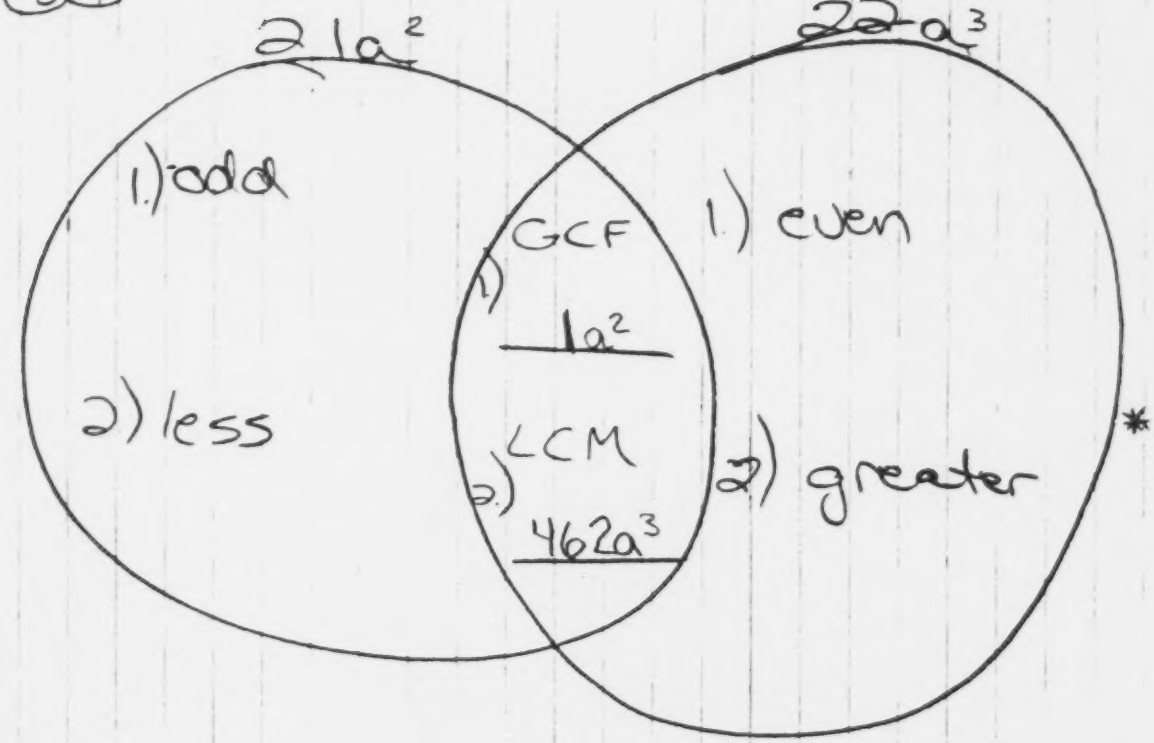
Steph Nadja +6

22 21
11 2 3 7



* Numbers are birthdate. Letters represent the quantity of "a's" in full name.

$$\begin{array}{r} 22 \\ \times\ 21 \\ \hline 22 \\ 440 \\ \hline 462 \end{array}$$

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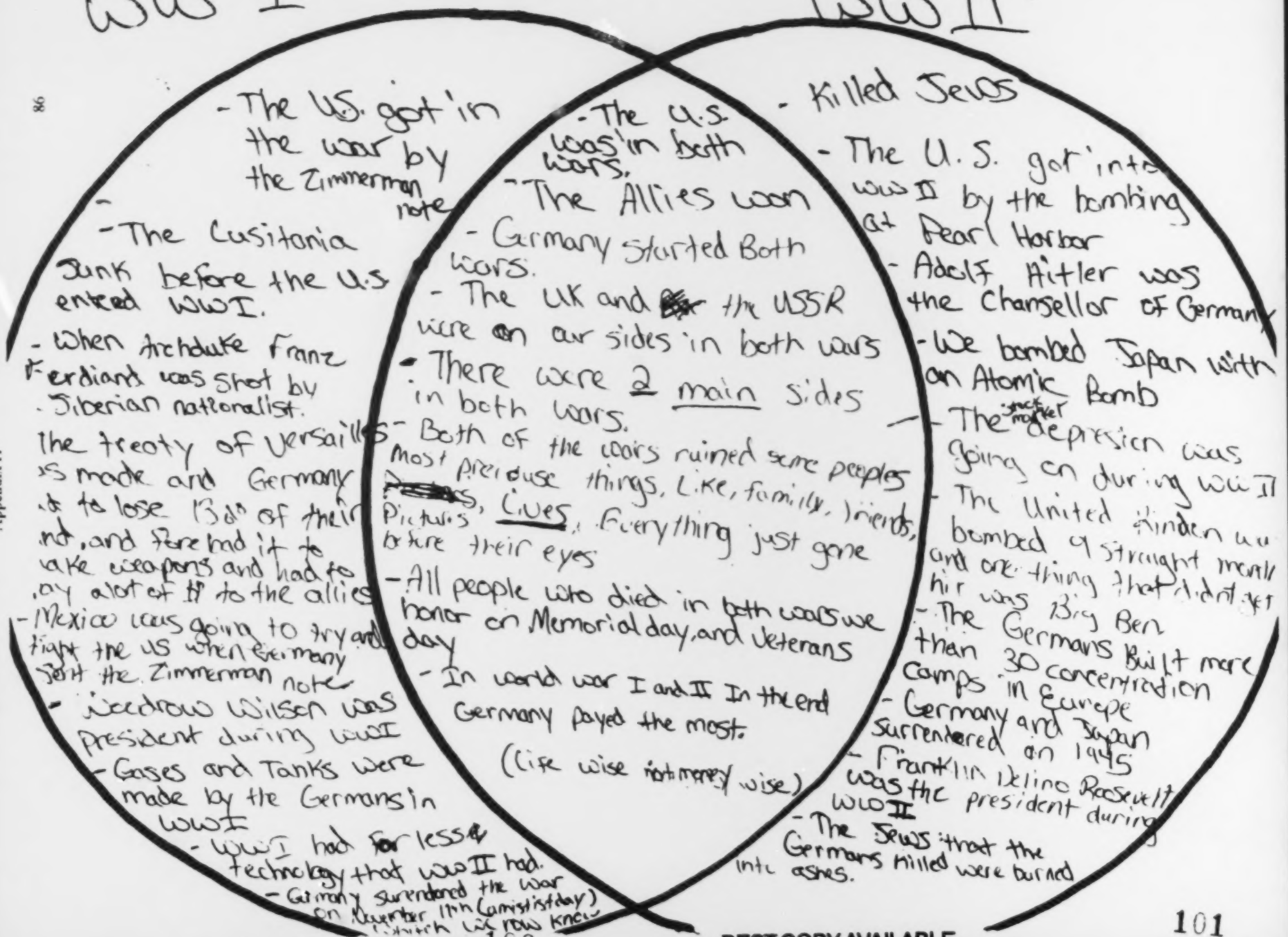
Appendix G


WW I
WW II
- The U.S. got in the war by the Zimmerman note
- The Lusitania sunk before the U.S entered WWI.
- When Archduke Franz Ferdiand was shot by Siberian nationalist.
The treaty of Versailles is made and Germany has to lose 13% of their land, and therefore had it to make weapons and had to pay alot of it to the allies
- Mexico was going to try and fight the US when Germany sent the Zimmerman note
- Woodrow Wilson was president during WWI
- Gases and Tanks were made by the Germans in WWI
- WWI had far less technology that WWII had.
- Germany surrendered the war on November 11th (armistis day) (Veterans Day now know)
- The U.S was in both wars.
- The Allies won
- Germany started Both wars.
- The UK and the USSR were on our sides in both wars
- There were 2 main sides in both wars.
- Both of the wars ruined some peoples most precious things, Like, family, friends, Pictures, Lives, Everything just gone before their eyes
- All people who died in both wars we honor on Memorial day, and Veterans day
- In world war I and II In the end Germany payed the most.
(life wise not money wise)
- Killed Jews
- The U.S. got into WWII by the bombing at Pearl Harbor
- Adolf Hitler was the Chancellor of Germany
- We bombed Japan with an Atomic Bomb
- The stock market depresion was going on during WWII
- The United Kingdom was bombed 9 straight month and one thing that didn't get hit was Big Ben
- The Germans Built more than 30 concentration camps in Europe
- Germany and Japan surrendered on 1945
- Franklin Delino Roosevelt was the president during WWII
- The Jews that the Germans killed were burned into ashes.

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Consequences
Conference
Phone Call
Principal
Activity
Points
Warning

Parts of an Essay

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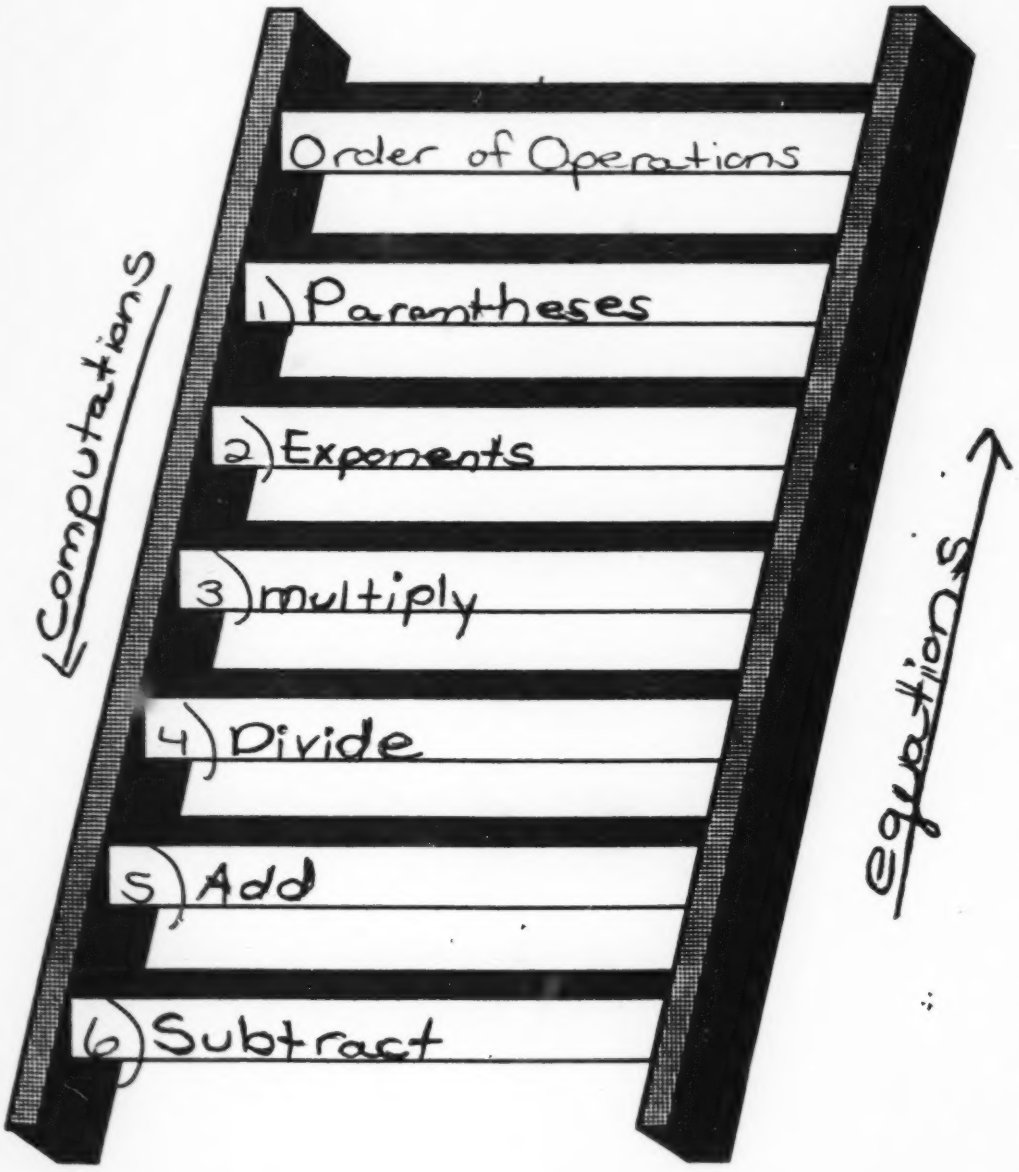
NAME Key CLASS _____

RANKING LADDER



Name _____

	Looks	Feels
iuper	happ	goodinside
Fine	good	good
OK	in between	inthe middle
SO-SO	upset	Bad Sad Not to good
twful	very upset very sad very Angry	not super disappointed horrible

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Looks like 00	Sounds like 91 .3
hands raised - waiting to be recognized	quiet voices
attention (eyes) to the speaker	one person talking at a time
hands, feet, objects to yourself	use of appropriate vocabulary/conversation
everyone is in seat	ask appropriate questions
cooperating	no sounds (desks, pencils tapping)
	manners expressed
Small groups	
everyone is focused	expressing ideas
everyone has a job/role	contributing to group
cooperating	6" voices
	appropriate topics
	appropriate answers

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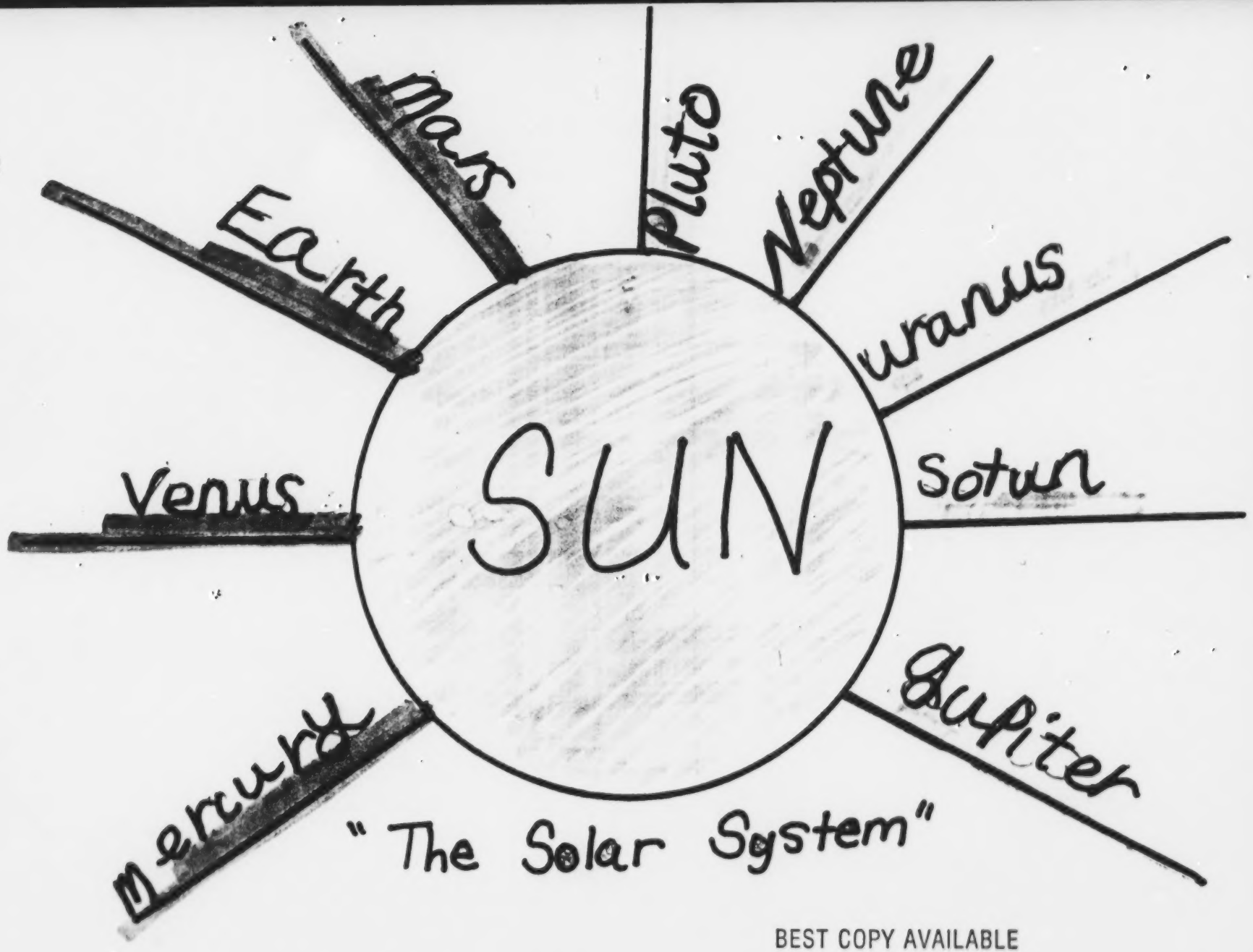

"The Solar System"

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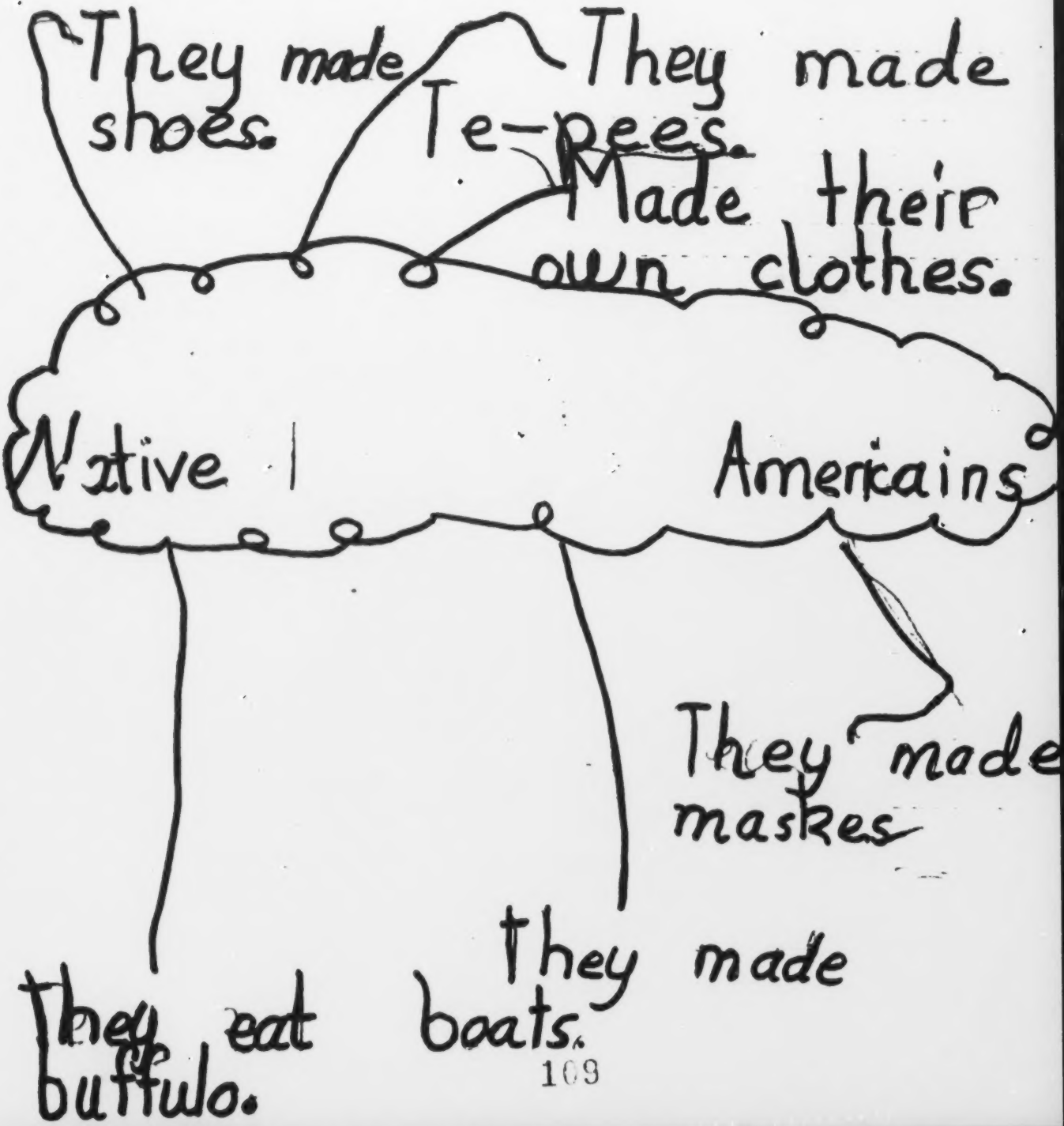
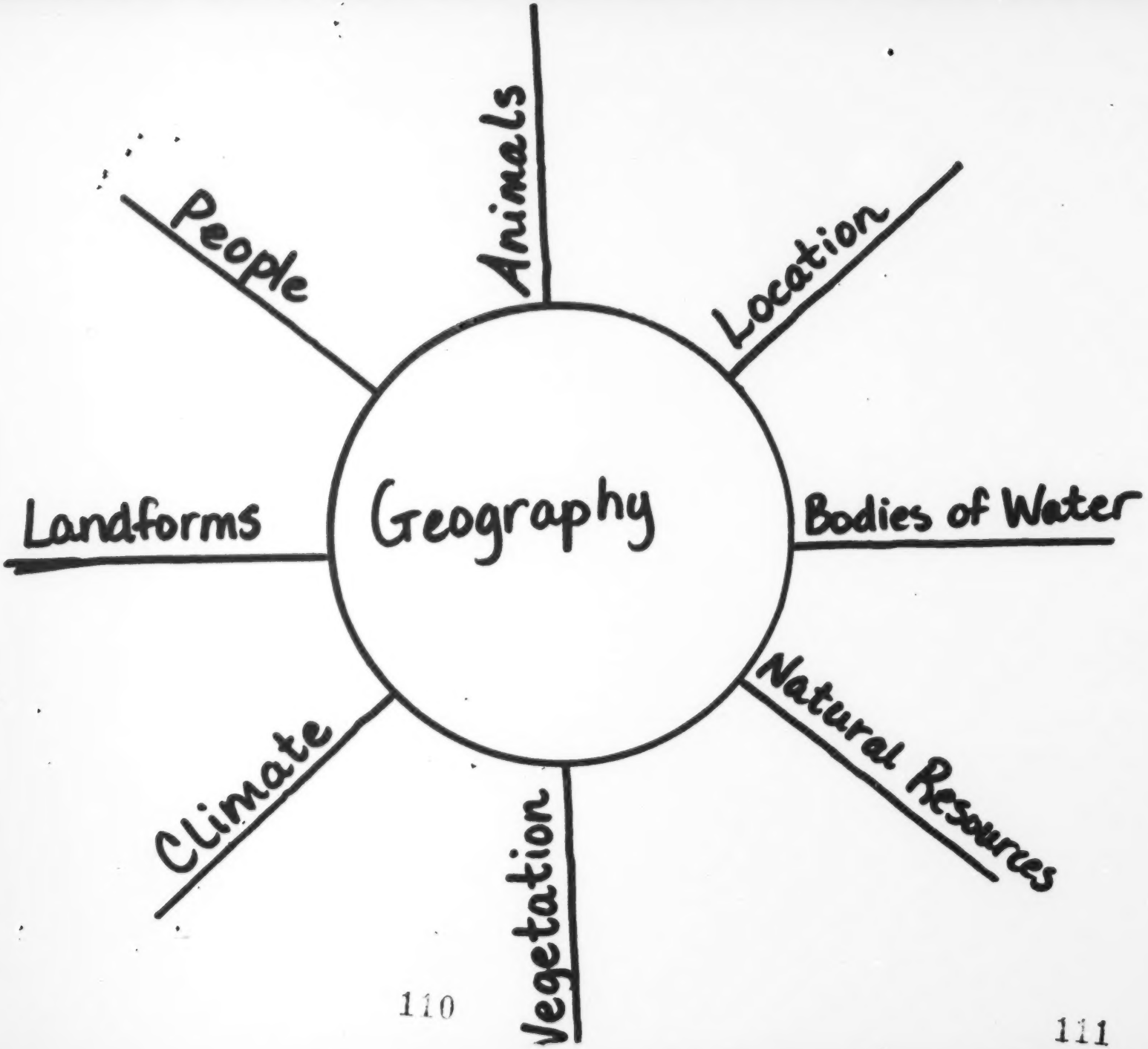
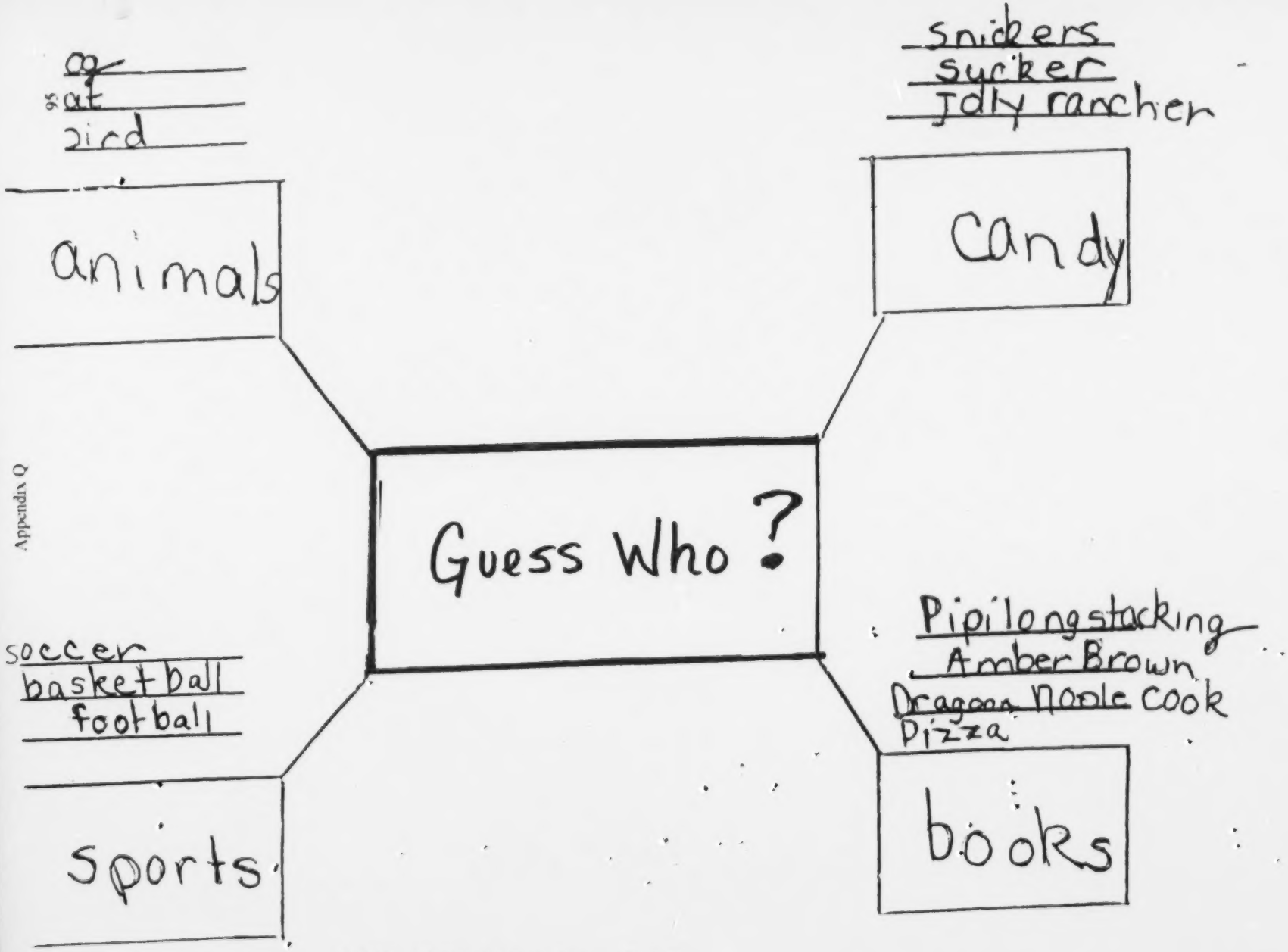
Oct 14, 1998 Derek




Geography
People
Animals
Location
Landforms
Bodies of Water
Climate
Vegetation
Natural Resources



Appendix Q

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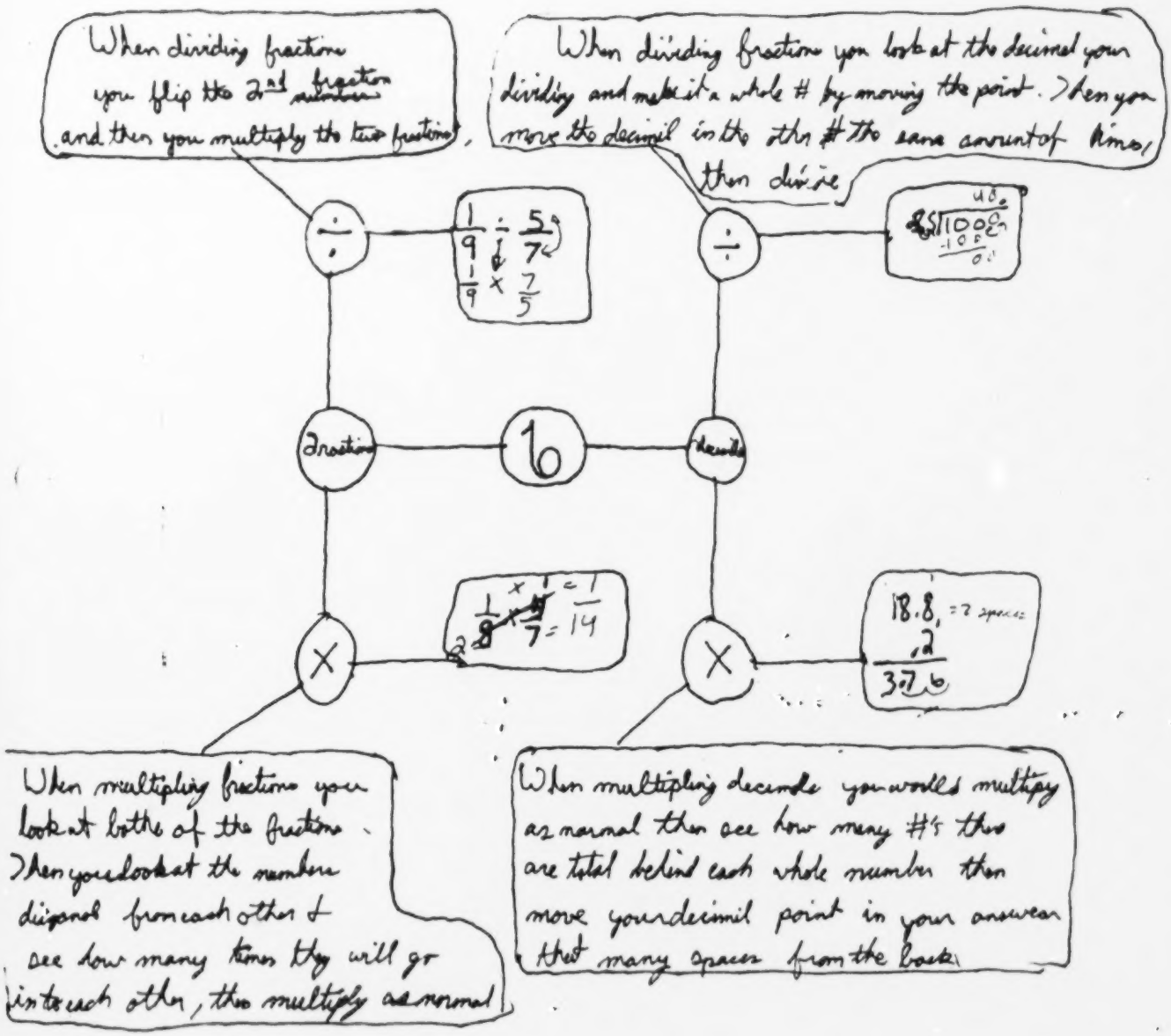
96

Kevin [redacted]
Period 6
12-16-98


When dividing fractions you flip the 2nd fraction and then you multiply the two fractions.
When dividing fractions you look at the decimal you dividing and make it a whole # by moving the point. Then you move the decimil in the other # the same amount of times, then divide.
÷
÷
1/9 ÷ 5/7
1/9 × 7/5
$5.10 ÷ .05
-10
0
Fraction
16
Decimle
1/8 × 1/7 = 1/14
18.8, = 2 spaces
.2
376
X
X
When multiplying fractions you look at bothe of the fractions. Then you look at the numbers diagonal from each other & see how many times they will go into each other, then multiply as normal
When multiplying decimle you would multiply as normal then see how many #'s there are total behind each whole number then move your decimil point in your answear that many spaces from the back.

Hillary Y.

balloon Globe

Plus	Mins	?
I Learnd the 4 ocans T Learnd 11 the ontinents	It was hard to glue on the equator was relly hard	Interesting I learn how the Eath wor

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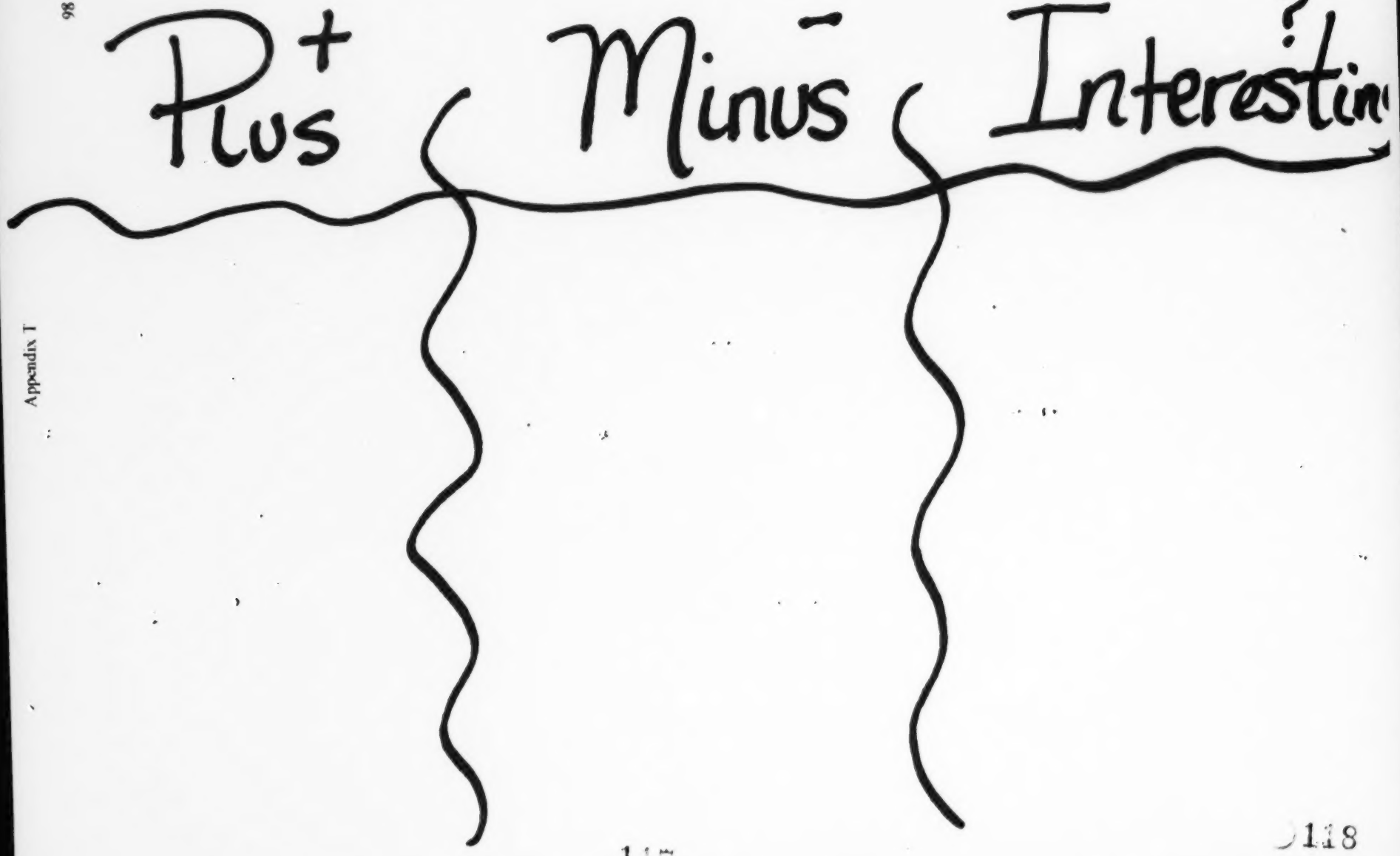
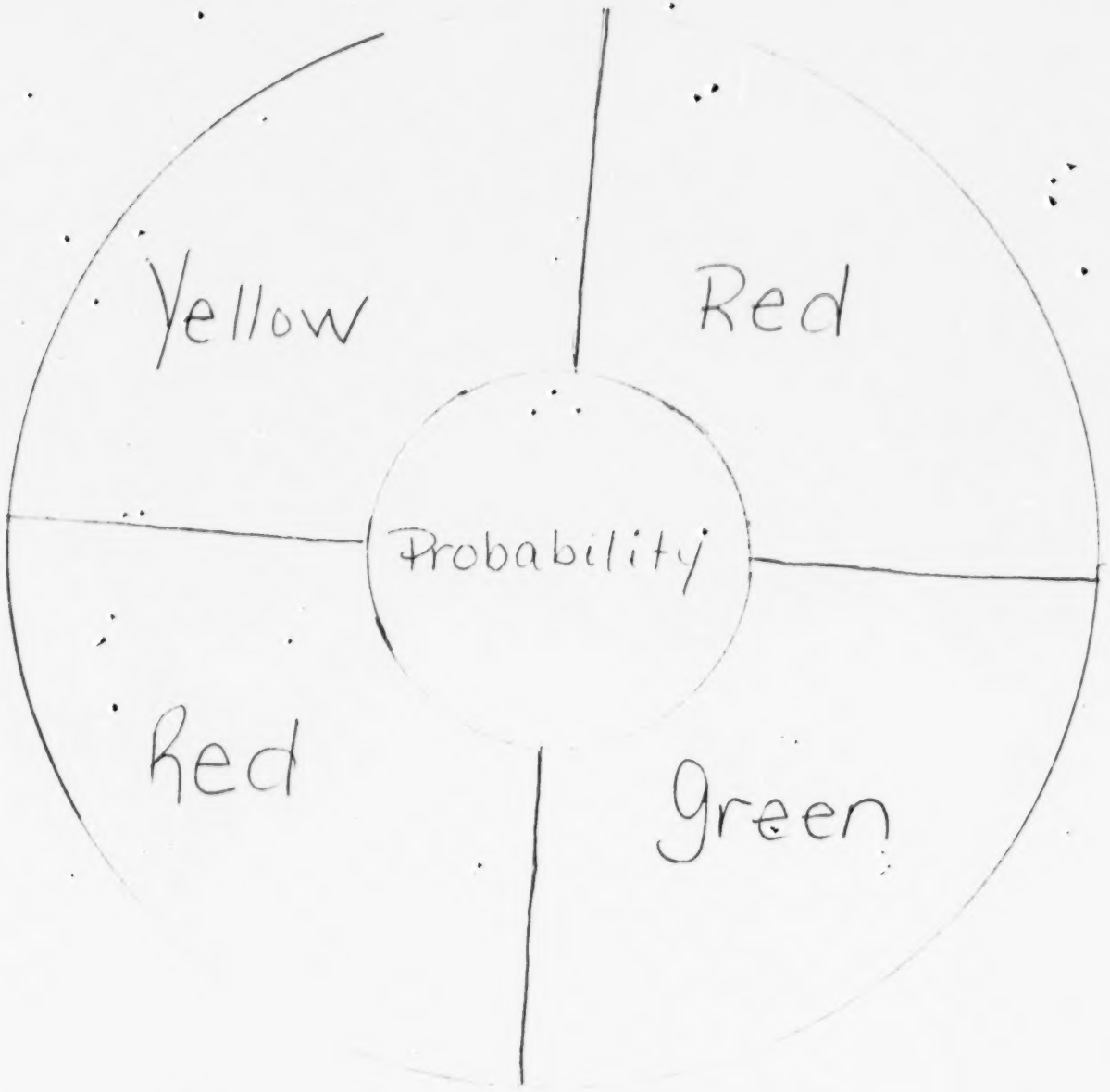
Activity: Caravan Unit

Name _____



Appendix T

Appendix U



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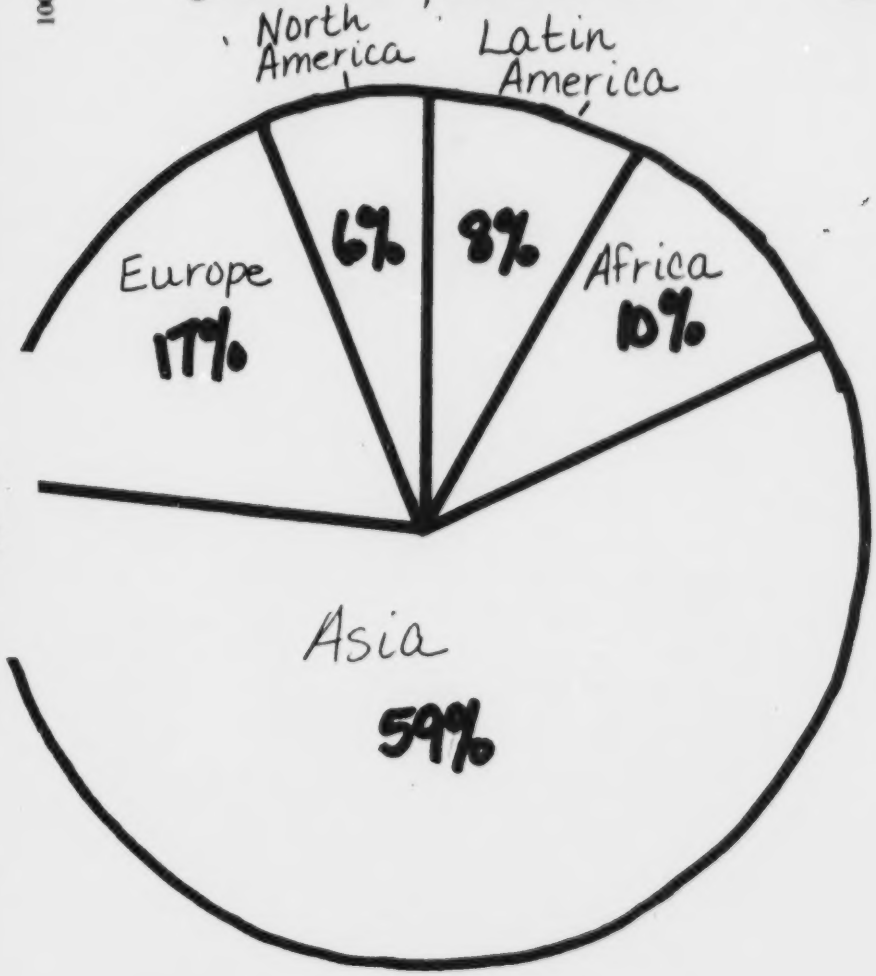
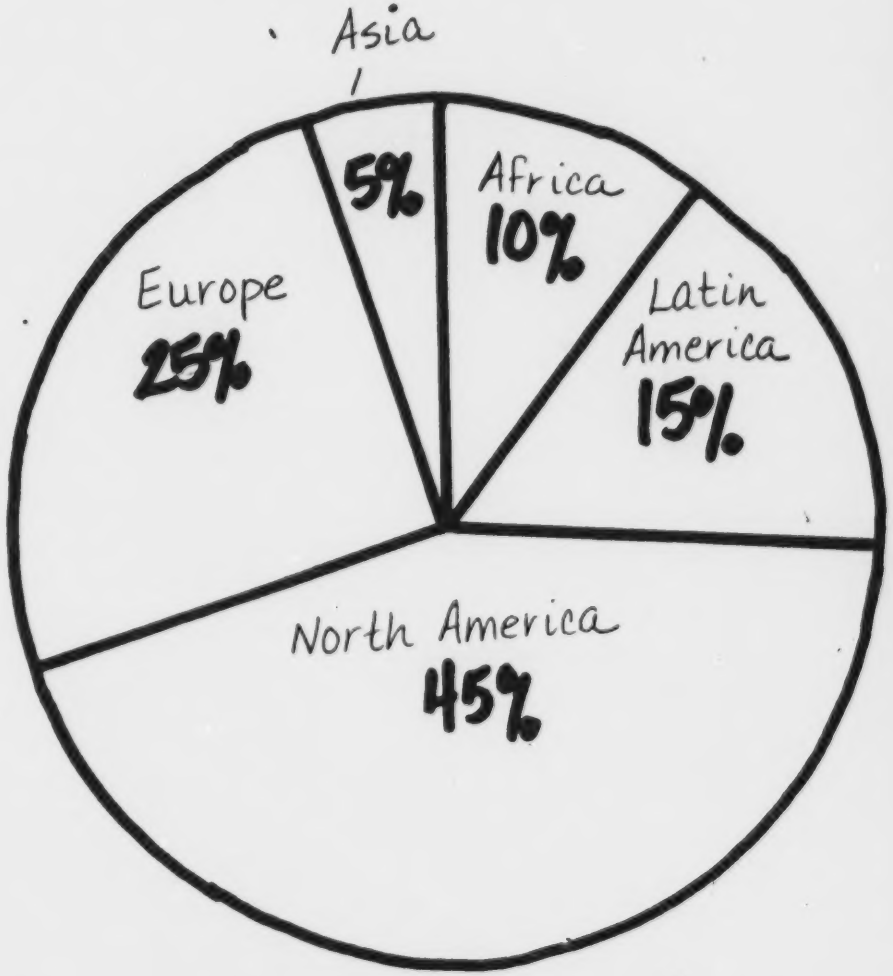
Global Cookies



World Population



World Food Supply

ASSESSMENT USE LOG

DATE	SUBJECT/ GROUP	ASSESSMENT	BASIC/ ABSTRACT	AUTHOR GEN / TEACHER CREATED

COMFORT LEVEL ACTIVITY RESULTS - "FACES"

ACTIVITY	DATE	% AWFUL	% SO-SO	% OK	% FINE	% SUPER

EVALUATION FOR READING WORKSHEET (RUBRIC)

5 points- Writing is neat, clear, and well organized.
Writing represents original thinking.
All appropriate capitals and punctuation.
Title and author's name present with appropriate capitals and punctuation.
All words spelled correctly.
Must have personal opinion and rational for opinion.
Must have at least 5 sentences.

4 points- Writing is reasonably neat, clear, and well organized.
Writing represents original thinking.
Appropriate capitals and punctuation mostly present.
Title and author's name are present.
Spelling errors are very few.
Must have a personal opinion.
Must have at least 4 sentences.

3 points- Writing reasonably acceptable.
Most of the summary represents original thinking.
Most capitals and punctuation present.
Spelling errors are no more than 2.
Personal opinion vague.
Has at least 3 sentences.

1or 2 points- Writing needs much improvement.
Most of the summary copied from the reading.
Capitals and punctuation rare or not present.
Many spelling errors.
Number of sentences unimportant.

-5 X points- No attempt taken.

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Board Game Evaluation

Name:

Assignment:	*Absent* 0	*NSH* 1	*OK* 2	*Good* 3	*Great* 4
TITLE a. Prominent, clear b. Summarizes theme c. Correct spelling / punctuation					
CONTAINER a. Adequate size b. Sturdy c. Decorated/designed to identify theme					
BOARD a. Sturdy b. Uniform and adequate spaces c. Eye-catching design; reflects theme d. Correct spelling					
MARKERS/MATERIALS a. Adequate size b. Easily distinguishable c. Workable; sturdy					
DIRECTIONS a. Clear; easy to follow b. List materials needed c. Correct spelling / punctuation					
CONTENT a. Accurate b. Enhances knowledge c. Complete coverage					
APPEARANCE (Neatness) a. Legible letter forms b. Effective word and letter spacing c. Clean corrections					

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1. Sports
2. soccer
2. basketball
2. swimming
1. Sports

The Problem Solving Proc

.. Problem Statement
1 sentence

!. Process
6 sentences

, . Evaluation
3 sentences

Name: _____ Topic: _____

107

Appendix CC

Rubric for Content Evaluation

	4	3	2	1	
Cover	Word processed, clear prominent title; includes student name and date - no errors	Word processed or hand written, not titled, minimal errors	Use spiral paper, printed not easily read	Missing title or name and date	x 1 = _____
Content	Information is accurate, current, presented in organized / chronological order	Information is accurate and current, but not presented in order	Information is confusing; not presented in organized manner	Information not accurate, not relevant to topic	x 5 = _____
Mechanics	No spelling, grammatical or punctuation errors; good use of transitions between paragraphs	No spelling, grammatical or punctuation errors; inconsistent with transitions between paragraphs	Minimal grammatical or punctuation errors; lacks transitions between paragraphs	Fragment sentences or run-ons; many spelling, grammatical or punctuation errors	x 3 = _____
Bibliography	Used more than three sources	Used three sources	Used two sources	Used only one source	x 1 = _____
Neatness	Word processed - 12 font, double spaced, no errors, indented paragraphs	Word processed or hand written in cursive, blue or black ink, minimal errors	Printed, several errors, words scribbled out or whited out	Illegible, used spiral paper, can't be easily read	x 3 = _____

BEST COPY AVAILABLE

Total: _____

NAME _____

ORAL PRESENTATION EVALUATION

This form shows how your oral presentation has been evaluated. It indicates where you need improvement and where you have done well.

TOPIC_____

I. PRESENTATION (29 points possible)

A.	Eye contact	4 3 2 1 0
B.	Voice projection	4 3 2 1 0
C.	Variation of speed and tone	4 3 2 1 0
D.	Articulation	4 3 2 1 0
E.	Body language/posture	4 3 2 1 0
F.	Appropriate vocabulary	4 3 2 1 0
G.	Information is easy to understand	4 3 2 1 0
H.	Incorporation of visual aid	4 3 2 1 0

Subtotal _____

II. CONTENT (15 POINTS POSSIBLE)

A.	Confidence in knowledge of topic	4 3 2 1 0
B.	Information is current	4 3 2 1 0
C.	Information is accurate	4 3 2 1 0
D.	Enough info./meets minimal requirements	4 3 2 1 0
E.	Ability to answer reasonable questions	4 3 2 1 0

Subtotal _____

TOTAL _____